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Dying under the Bird's Shadow

Narrative Representations of *Degegede* and Child Survival among
the Zaramo of Tanzania

In this article, I examine the cultural interpretations of degegede, an indigenous illness commonly recognized by the Zaramo people of coastal Tanzania as life threatening. Drawing on the narratives of three bereaved parents who lost a child to degegede, I analyze the contextual and circumstantial factors involved in these parents' negotiation of the identity of an illness and in their subsequent therapy seeking behavior. I show that even though cultural knowledge and etiological beliefs about degegede may be shared locally, there is significant variation in the therapeutic pathways that parents follow to deal with an actual episode of the illness. I emphasize the need for more contextualized data on health-seeking behaviors, and argue that it is necessary to pay attention to the micropolitics of health care decision making at the household level. Finally, I also call attention to the politics of provider-patient communication at public health facilities as a means to improve public health interventions to increase child survival.

Keywords: [*degegede*, malaria, illness narratives, context, child survival, Tanzania]

The intense heat in coastal Tanzania peaks during the month of December and has a profound effect on the everyday lives of the people of Mbande,¹ a village on the outskirts of the major port city of Dar es Salaam.² On one particularly hot and humid December afternoon in Mbande, Mwanzani, an anxious 44-year-old mother, was trying to revive her dying two-year-old daughter, Salama. A "traditional healer" (*mganga*, plural *waganga*) had diagnosed Salama with *degegede*, the indigenous name for a life-threatening folk illness that from a biomedical perspective is often equated in very general terms with cerebral malaria marked by febrile convulsions.³ Salama eventually succumbed to her illness and died later that afternoon. The child's father, Mzee Omary, alongside others who came to mourn her death, summed up the misfortune as *mwenyezi mungu* (it is God's will). Salama was buried within two hours of her death at a graveyard behind the *mganga's* house. A *shehe* (religious leader) performed a very simple burial ceremony that was attended by about 40

MEDICAL ANTHROPOLOGY QUARTERLY, Vol. 22, Issue 1, pp. 67–93, ISSN 0745-5194, online ISSN 1548-1387. © 2008 by the American Anthropological Association. All rights reserved. DOI: 10.1111/j.1548-1387.2008.00004.x

people. As each of the mourners offered condolences to Salama's mother, they uttered oft-heard phrases in the village surrounding acceptance of death: "bahati mbaya" (bad luck); "mwenyezi mungu," and in a further resigned tone, "tulikua fanya je?!" (What could we have done?!).

In this article, I discuss the cultural representations of *degedege* in Mbande and examine why parents or caretakers of children who have developed high fevers do not necessarily follow a linear or patterned trajectory in their search for therapy. I show that, even though cultural knowledge and etiological beliefs about *degedege* may be shared locally, there is significant variation in the therapeutic pathways that parents follow to deal with an actual episode of the illness. Drawing mainly on the narratives of three bereaved parents in Mbande who recently lost a child to *degedege*, I highlight the contextual and circumstantial factors involved in the death of three children.

In this article, then, I specifically call attention to the micropolitics of therapy management—the not-so-obvious sociocultural and contextual factors that influence the manner in which people negotiate the identity of an illness. I investigate how people deal with illness at the household level and the local health arena in a crisis situation (see Nichter 2002). I emphasize how these factors intersect with structural constraints and circumstances and often lead to tragic outcomes. Here, I define the structural, contextual, and circumstantial factors as physical, social, and communication barriers, a limited ability to utilize resources including biomedical health facilities owing to poverty, little or no previous experience with the illness, ill-fated timing of the illness, and the lack of social support and appropriate advice from members of one's social networks.

The article begins with a brief review of the anthropological literature on child survival and an overview of the nature and magnitude of the changes that have occurred in Tanzania's health sector owing to the government's decision in 1991 to liberalize the economy and privatize the health sector. This is followed by a review of the nature and magnitude of malaria in Tanzania with specific reference to the local epidemiology of malaria in Dar es Salaam. I then describe the ethnographic setting and the methods used to gather data for this study. Next, I discuss the folk etiology of *degedege*, the indigenous therapies used to deal with the illness in Mbande, and the shifting preference for biomedical treatment for childhood febrile illness. I also present and analyze three case studies of child death attributed to *degedege* that I documented during my fieldwork. These sections lead to an analytic discussion in which I argue for a more nuanced understanding of *degedege* and child survival.

Child Survival and Attention to Context

Some scholars have focused their attention on a range of proximal determinants such as maternal factors (age, parity, and birth interval) and nutrient deficiency that determine child survival. They argue, for example, that a mother's educational status has a direct bearing on her child's chances of survival during episodes of diarrhea or acute respiratory illness. Other scholars focus their attention more on distal social and economic factors that operate at the individual, household, and community levels to influence child health and survival (cf. Adams et al. 2002; Caulfield et al. 2004; Mosley and Chen 1984; Nichter and Kendall 1991). These scholars argue,

for example, that the level of food availability and resources at the household and community level has a major impact on children's health and their survival. And still other scholars have called attention to the relatively unexplored contextual and circumstantial factors influencing child survival, including gender, power, and agency (cf. Baume et al. 2000; Castle 1994; de Souza Terra et al. 2000; Dettwyler 1992; Finerman 1994; Helitzer-Allen et al. 1993; Molyneux et al. 2002; Nations and Rebhun 1988; Price 1987; Scheper-Hughes 1992). In the Brazilian context, Nations and Rebhun (1988:147) suggest that health care seeking in poor communities cannot be adequately understood without detailed knowledge of the nature of care available and the difficulties involved in seeking it. They have also noted that decisions on treatment of severe and terminal disease cannot be understood without reference to communal medical ethics. Likewise, Sarah Castle (1994:330) argues that in rural Mali explanations for children's deaths resulting from folk illnesses such as *foundu* and *heendu* need to be examined in their cultural context because they are often formulated post facto through a series of social negotiations within the context of the household or community hierarchy.

Even a brief survey of the medical anthropological literature on child survival and selective neglect clearly indicates that obtaining contextual knowledge is crucial to a nuanced understanding of how people in different cultural contexts deal with child survival issues, and with child death in particular. The literature also suggests that, in addition to local contextual factors, the broader social and political factors also play a key role in determining health-seeking behaviors, as is evident in Tanzania's postsocialist context.

Tanzania's Transition from Socialist Medicine to Free Market Medicine

The Arusha Declaration of 1967, the manifesto in which Julius Nyerere, Tanzania's first president, articulated his *ujamaa* (lit., familyhood) policy, guaranteed the people of Tanzania access to free health care, among other basic rights (Nyerere 1977). In 1991, however, under pressures from the World Bank and IMF, Tanzania formally abandoned its commitment to socialist health policy and undertook measures to privatize the country's health sector in response to the nation's commitment to the implementation of neoliberal economic reforms (Baregu 1994; McHenry 1994). As a first step, the Private Hospitals Regulation Act of 1977, which prohibited all forms of "for-profit" medical practices in the country, was repealed (Tripp 1997). The newly introduced health-sector reforms allowed qualified medical practitioners to manage private hospitals on an individual basis, provided that they received approval from the Ministry of Health. In 1994, the government decided to grant physicians the right to legally treat private patients after regular working hours. At the same time, the government gradually discontinued the provision of free health care at government health facilities. From July 1994 onward, patients attending public health facilities in urban and periurban areas were required to pay a nominal fee in return for the services they received. The removal of government restrictions on private medical practice led to a dramatic increase in the number of private practitioner clinics, pathology laboratories, and pharmacies (*duka la dawa*) throughout the country, particularly in urban and periurban areas. Thus, in 1996, private health facilities represented more than 40 percent of the Tanzania's health facilities, as compared to

only one percent in 1991 (Tripp 1997). In the year 2000, there were at least 1,673 health facilities owned and operated by NGOs, religious organizations, and private entrepreneurs. In Dar es Salaam, by the year 2001, nearly two-thirds of the health facilities were privately owned.

Despite these interventions, privatization (*ubinafsishaji*) of the health sector has not led to major improvements in the health and wellness of the people of Tanzania. Tanzanian health indicators rank among the worst in the world; morbidity and mortality rates, as well as rates of life-threatening infectious diseases, are exceedingly high (Setel 1999; Wyss et al. 2001). In 2002, for example, the infant mortality rate in Tanzania was 77.85 deaths per 1,000 live births, and the maternal mortality rate was 550 deaths per 100,000 live births. More than a decade after its decision to liberalize the economy, Tanzania, with a population of 36 million, remains one of the world's poorest nations with a per capita GDP of \$457 and a per capita income of \$280 per year. This grim level of poverty coupled with an inadequate health infrastructure often translates into excessive childhood illnesses and malaria-related deaths.

Nature and Magnitude of Malaria in Tanzania

Scholars who have emphasized the large-scale historical, political, and economic factors that determine the nature and magnitude of malaria in Tanzania have shown how the country's burden of malaria morbidity and mortality can be traced to the decision of the World Health Organization (WHO) in the 1960s to keep Africa out of the Global Malaria Eradication Program (cf. Dobson et al. 2000; Malowany 2000; Packard and Brown 1997). Others scholars have called attention to context-specific problems in regard to malaria-related child mortality. These problems include a lack of protection from infective mosquito bites, poor diagnosis and quality of health care, antimalarial drug resistance, delays in seeking appropriate medical attention, poor adherence to recommended therapy, and chronic anemia (cf. Boland et al. 2000; Comoro et al. 2003; Crawley 2004; Kachur et al. 2006; Mwenesi et al. 1995; Nsimba et al. 2002; Plowe 2003; Snow et al. 2004; Snow et al. 2001; White 2004).⁴

In Tanzania, malaria transmission is felt intensely, particularly in rural areas. Of the 100,000–125,000 people who die from malaria and related complications each year, an estimated 70,000–80,000 are children under the age of five. Malaria is the leading cause of death among hospitalized people. It is also the main reason to admit children less than five years of age at medical facilities (Ministry of Health, Government of Tanzania 2003; see also East African Network for Monitoring Antimalarial Treatment 2001; Snow et al. 2004). Dar es Salaam, which is characterized by a hot, humid tropical climate and two rainy seasons, is an area where malaria is endemic and perennial. The deadly *Plasmodium falciparum* is the predominant malaria parasite, accounting for 90 percent of all cases. It is primarily transmitted by mosquitoes of the genus *Anopheles*-*Anopheles gambiae* and *Anopheles Funestus*. Reliable epidemiological data on malaria morbidity and mortality in Dar es Salaam are not easily obtainable. Although some sources have estimated that as many as one million cases of malaria are reported at public health facilities in the city each year, others argue that this could be an overestimation that has important implications for the management of severe febrile illness, including unnecessary treatments and

consequent neglect of alternative diagnoses that could potentially lead to avoidable morbidity and mortality (cf. de Castro et al. 2004; Wang et al. 2006). The debate over numbers notwithstanding, the fact remains that more than two-thirds of malaria-attributed febrile illnesses are dealt with outside of the formal medical system. These cases are frequently unrecorded and thus overlooked in the official vital statistics on malaria morbidity and mortality (see Breman 2001; Jones and Williams 2004).

Fieldwork Setting and Methods

Mbande, the village where I conducted 16 months of continuous fieldwork (May 2000–September 2001), has a population of about 5,500 people and is located on the periphery of Temeke District, Dar es Salaam. Of the 95 percent of the local residents who are Muslim, 40 percent identify themselves as Zaramo, the original inhabitants of Dar es Salaam (Swantz 1995). Subsistence-oriented farming is the economic base for the majority of the local people, while a small proportion of villagers engage in small business ventures such as the selling of *chapatis*, tea, fruits, and vegetables in the marketplace. For most, cash income is scarce—the average per capita monthly cash income (computed from a household survey described below) in the village is approximately TSh. 1475 (< \$2). Especially among poor and socially excluded people, formulaic pronouncements such as *maisha magumu!* (“Life is hard!”) have become common. They most frequently arise in everyday conversations about the government’s decision to “free the market” as part of neoliberal economic reforms (see Kamat In press a).

The local health arena is pluralistic as villagers have access to “traditional” Swahili medicine, biomedicine, and pharmaceuticals, provided they can pay for therapy. Located five minutes away from the main marketplace is a municipal dispensary (*zahanati*) staffed by an experienced medical officer (hereafter “doctor”), and three nurses, two of whom are Mother and Child Health specialists, and an auxiliary trainee nurse. Patients, especially young children, are rarely refused treatment if they are unable to pay the required fees. In general, the dispensary is well equipped, but it does not have any field extension services. Additionally, the staff is not trained in the Integrated Management of Childhood Illnesses (IMCI; for details see Schellenberg Armstrong et al. 2004). Patients are occasionally referred to the district hospital, which is located some 20 kilometers from the village. Between January 1, 2001, and September 30, 2001, as many as 800 cases of fever, including those diagnosed with malaria and excluding those diagnosed with acute respiratory illness (ARI), were treated at the dispensary. In most cases, the mothers would arrive at the dispensary 48 to 72 hours after they had first noticed that their child had a fever. Also within the village are three privately owned pharmacies, all of which are operated by unqualified pharmacists who offer a range of medications, including antibiotics, over the counter. There are four known *waganga* who reside in the village. Only one of them, Mzee Pazi, who is in his mid-eighties, practices on a full-time basis. On average, he attends to five or six patients a week, many of whom come from distant places (see Kamat In press b).

The data presented in this article were gathered as part of a larger ethnographic study on the impact of health-sector privatization on medical decision making in

Tanzania's postsocialist context (Kamat 2004). While this article is based mainly on illness-narrative interviews and direct participant-observation, data from a household socioeconomic and health survey are also included. To develop a sampling frame for the survey, I first conducted a census in four sectors of the village, covering a total of 354 households and yielding a total population of 1,513 inhabitants. A total of 116 of the households had at least one child of five years and younger. The heads of these 116 households were interviewed for the household socioeconomic and health survey. The survey covered general demographic and socioeconomic background information; marital history; migration history; land ownership; cultural and social resources available in times of crisis; attitudes toward health sector reforms and user fees; patterns of resort or choice of therapy for a range of common and life-threatening illnesses; and knowledge, attitude, and practices pertaining specifically to malaria and degedege. During my fieldwork, I also consulted with 28 elderly people (both male and female) and with local waganga known for their expertise in diagnosing and treating cases of degedege.

In addition, I draw on data derived from ethnographic interviews with 45 mothers of children who were diagnosed with severe malaria at the local dispensary. I conducted in-depth narrative interviews, often but not always with the help of a research assistant, in the Kiswahili language in the homes of the narrators.⁵ These interviews, which lasted between 50 and 90 minutes, were audiotape-recorded, transcribed verbatim in Kiswahili by two research assistants in the field, and later translated into English for analysis. The text data from the ethnographic interviews were processed using Microsoft Word to do a line-by-line discourse analysis (see Hill 2005). Census and household survey data gathered as part of the larger study were processed using SPSS (ver. 10.5) for Windows. I elaborated on the notes from my field diary and ultimately incorporated them into the analysis.

Folk Etiology of Degedege

The Kiswahili word degedege literally translates into English as "bird bird." The illness, according to coastal Tanzanians and the Zaramo people in particular, is believed to be caused by a coastal spirit (*mdudu shetani*) that takes the form of a bird and casts its shadow on vulnerable children on moonlit nights. Children who come under the bird's shadow subsequently become seriously ill, develop convulsions, and in many cases succumb to the illness and die (cf. Comoro et al. 2003; Gessler et al. 1995; Hausmann Muela et al. 2002; Kamat 2006; Makemba et al. 1996; Tarimo et al. 2000; Winch 1999; Winch et al. 1996).⁶ In Mbande, people believe that the attack is not carried out with harmful intent. Sorcery (*kurogwa*) and witchcraft (*uchawi*) are not usually associated with cases of degedege. Rather, they consider "bad luck" or "God's will" to render particular children more vulnerable than others to succumbing to the bird's shadow.⁷ Thus, when asked why some children are more prone to contracting degedege than others, key informants responded by saying that it was just "God's wish" or "God's work" (*kazi ya mungu*).

At first glance, elderly people's responses indicated that there was a general agreement with regard to the sharing of etiological beliefs about degedege. Most elders and healers, for instance, agreed that the illness has something to do with a "spirit bird." Yet, a close analysis of the recorded interviews revealed that the information

the elders provided varied greatly in terms of the details on the etiology, symptoms, susceptibility, treatment modality, and preventive measures for degegede. While elderly informants spoke with an element of confidence about the illness, younger informants, especially young mothers, spoke of degegede in terms of what they had gleaned by word of mouth. They stated that they had heard about degegede from others and they knew that it was a dangerous illness that could strike any child at random.

In light of recent studies addressing the problem of “misdiagnosis” of malaria resulting from symptom overlap and other illnesses complicated by high fever and convulsions (cf. Chandramohan et al. 2002; Kallander et al. 2004), it is pertinent to ask how people identify the symptoms that differentiate degegede from other illnesses marked by fever and convulsions. Key informants, mainly mothers with firsthand experiences of dealing with degegede, described its typical symptoms as: (a) the child’s body temperature shoots up and the body becomes dry and stiff; (b) the child’s eyes are usually closed, and, when they are open, one can see that they are all white—the pupils have disappeared; (c) the eyes have become large and rolled up; (d) the mouth is stiff and breathing is unstable; (e) legs and arms are stiff and the body convulses (*kustuka*), and (f) the child is frothing at the mouth (*mapovu mdomoni*). For example, after her son’s recovery from an episode of degegede, Husna, a 24-year-old mother, described his condition: “Salim’s eyes looked as if he was terrified by something that only he could see. Then he started convulsing repeatedly, and he defecated as if he had been severely constipated. He passed stools that looked just like goat’s feces [*mlenda mlenda*].” For some mothers, then, the characteristic symptoms associated with this illness had been integrated into their cultural repertoire. In sharing their experiences with degegede, mainly through illness narratives, the mothers contributed to what Price (1987) calls “socially generated knowledge” regarding the illness in the community. While socially generated knowledge of degegede is widely shared in Mbande, specific details about the illness vary significantly between individuals.

Indigenous Therapy for Degegede

Elderly people in Mbande affirmed that the “traditional” therapy for degegede has significantly changed over the years. They attributed this change mainly to the greater presence of biomedicine in their lives, especially following the dramatic increase in the number of private health facilities in Dar es Salaam. Even so, several elders gave graphic accounts of the practice where, on noticing the first signs of the illness (convulsions), a mother would rush the child to a latrine (*choo*). There, the child would be laid on a banana leaf and washed with the mother’s urine. The smell of urine is believed to repel the spirit in possession of the child’s body, at which point the child would likely stop convulsing. It is only after this stage that the child is taken for treatment to a *mganga*, who normally checks the patient carefully before prescribing medicinal bathing herbs. While some *waganga* simply use knowledge from previous experience in treating degegede patients, others resort to divination or *ramli* (Swahili from the Arabic *Khatt-ar-raml*), a system of divination by calculation and examination of Arabic books that is widespread in East Africa (see Whyte 1997:64). The *mganga* may also give herbal medicines to

the patient to drink. Medicinal leaves are rubbed on the patient's legs and often on the whole body, while some of the leaves are boiled from which a decoction is given to the patient to drink. The patient usually rests for a few minutes and then passes urine or defecates. If the patient does either of these, it is concluded that the patient is on the way to recovery. If not, the patient is still in danger of dying.

Depending on the patient's condition, the mganga may treat the patient for three to four days or until he or she has completely recovered. If a patient recovers, he or she is permitted to return home with his or her parents, and no further treatment is recommended. The parents may then pay the mganga his fees, or they will pay at a later date if the mganga allows for flexibility. Key informants mentioned that, if parents are not satisfied with the treatment, they may then decide to take the patient to another mganga in the hope that he may offer more effective options. For example, one may go to a *mwalimu ya Quarani* who uses *kombe*, a drinkable medicine. Key informants also mentioned that in some cases, instead of going to a different mganga, parents may decide to take the child to a public or private hospital. If treatment at the hospital also fails, then the outcome is commonly described as "the patient's fate or predicament" (*bahati ya mtu*). In these cases, it is commonly believed that there was little that anyone could have done to save the child from dying.⁸

During my fieldwork, I was able to record four cases in which a child was brought to a local mganga for a possible diagnosis of degedege and its treatment. These cases offered a rare opportunity actually to witness and document the interaction between the parents of very sick children and the mganga who was being consulted. The mganga did not perform a *ramli* while attending to any of the four cases that he had diagnosed as degedege.⁹ Because of the fact that he was a highly experienced mganga, he was aware of the seriousness of the situation and pronounced his diagnosis quickly. In all four cases, he urged everyone around him to stay calm. He laid the child next to him and closely monitored the child's condition. This preliminary therapy was meant to prevent any panic from those present. Once the child had calmed down, the mganga would suggest to the parents that they wash the child's body with water infused with medicinal herbs. In all of the four cases that I observed, the mganga made liberal use of Indian curry leaves. Notably, three out of four children who were brought to the mganga recovered from their illness. In one of the three cases, the treatment and healing process continued for over two months. These "positive" experiences of parents act as cultural models for members of the local community on which to draw when dealing with childhood febrile illness. At the same time, they also point to the fact that parents' decision to consult a mganga to deal with childhood febrile illness need not be categorized as "inappropriate" or, by extension, directly or indirectly implicate healers in the many deaths that occur in Africa, especially among children suffering from severe malaria (cf. de Savigny et al. 2004; Hausmann Muela and Ribera 2003; Makemba et al. 1996; Molyneux et al. 2002).

Shifting Preference for Biomedicine in Treatment of Childhood Illnesses

In the literature on degegede in Tanzania, fear of injections is commonly cited to explain the overwhelming preference among the people to consult a *mganga* as opposed to a biomedical practitioner. Researchers have described the belief that, if a child who is suffering from degegede is given an injection, the needle will puncture the skin and allow malevolent spirits to enter the body, causing rapid death (see Makemba et al. 1996; Tarimo et al. 2000; Winch et al. 1996). While people in Mbande acknowledged that they shared this belief, they also stated that in the present context there is an overwhelming preference among the local people to treat malaria and several other childhood illnesses with injections because of their dramatic effects. This information is in accordance with studies that have documented the popularity of injections for various illnesses in Africa and elsewhere in developing countries (see Reeler 2000).

When respondents of the household survey in Mbande ($n = 116$) were asked what their first and second resorts would be if, in a hypothetical situation, their child were to start convulsing, 46 percent of the respondents indicated that they would initially rush their child to the local dispensary. Twenty-six percent mentioned that they would rush the child to a *mganga*, and another 21 percent said that they would try some form of home remedy, including the *tundu la choo* (urine) therapy, before taking the child to a *mganga* or the local dispensary. The remaining seven percent mentioned that they would take their sick child to other health facilities, including the district hospital and private medical practitioners. More significantly, two-thirds of the respondents indicated that, if the home remedy or consultation with a *mganga* failed to produce the expected result, as a second resort they would choose to go to a biomedical health facility. In addition to suggesting that there is a great deal of variation in people's patterns of resort, these data also suggest that biomedical health facilities are an important option, though not necessarily the primary one in all cases. Clearly, these statistical trends indicate what people would do in hypothetical situations, and not necessarily what they really do in "real-life" situations when they have to deal with an actual episode of degegede.

As a participant-observer at the dispensary in Mbande, I documented five cases where either (a) a mother rushed her child to the dispensary reporting that the child had experienced convulsions just before being brought there or (b) the child began convulsing while waiting to be seen by the doctor or one of the nurses. In all five cases, the dispensary staff and the mother made intensive efforts to bring the child's temperature down by sponging him or her with a wet cloth. Following this, the nurse administered a shot of chloroquine.¹⁰ Contrary to what many key informants told me about degegede and the fear popularly associated with the injections, none of the mothers challenged the dispensary staff's decision to treat the child with an injection. In follow-up interviews, all five mothers repeatedly stated that they had made the right decision to bring their children to the dispensary. Certainly, then, while in Mbande people widely acknowledge their fear of using an injection on a child suffering from degegede, in emergency situations, mothers whom I interviewed did rush their children to the local dispensary, even if it meant devolving agency to the dispensary staff.

Narrative Representations of Degedege-Attributed Deaths

In this section, I present three cases of degedege-attributed deaths in Mbande. These cases illustrate how parents negotiate the identity of a severe febrile illness and deal with it in real life situations. Collectively, these cases show that, although the parents shared the same cultural context, the illness trajectories and the therapeutic actions taken were noticeably different from one another. In all three cases, the end result was the child's death. The three cases highlight the multidimensional nature of the problem of child survival in the context of malaria transmission, poverty, and limited access to good quality health care.

Case 1: Salama

This case concerns the dynamics surrounding a father's decision to take his febrile and convulsing two-year-old daughter to a *mganga* rather than to the local dispensary, and the cultural explanations he gave for his daughter's death. The day after Salama (the child mentioned in the opening vignette) was buried, I briefly interviewed her father, Mzee Omary, a short, lean man in his early fifties. As one of the oldest residents of Mbande, his social network was extensive. I had previously interviewed him on the local history of the area and aspects of Zaramo cultural practices surrounding marriage and divorce, and I had documented his life history in detail. Mzee Omary, his wife, and seven of their children were living in a small mud hut in the heart of Mbande. Troubled by his deteriorating living conditions, he had lamented in an earlier interview about his personal hardships and the lack of opportunity his children received, owing to the fact that they did not have access to the fruits of "development" (*maendeleo*) in the postsocialist era.

Mzee Omary repeatedly emphasized in the interview that "he had done the right thing" by taking Salama to a *mganga* rather than to the local dispensary.¹¹ He said that several years earlier, when his second daughter had degedege, he had taken her to the same *mganga*, and she had recovered completely. Salama, he explained, had died because it was God's wish that she should not live any more. The family was powerless in preventing her death. Mzee Omary insisted that Salama's death had nothing to do with evil spirits (*mashaitani*) or sorcery (*uchawi*) and that there was no "underlying cause" for her death other than that it was "God's wish" that it should be so. He described his reaction to Salama's symptoms:

Monday afternoon she was playing around with her siblings as usual. But in the evening, she had slight fever. So that night I gave her an aspirin tablet that I had bought from the local pharmacist. The next morning she was a little better, but in the afternoon her fever shot up. I began to wonder: "Why is she getting this fever again and again?" I thought of sending her to the local dispensary, but then I saw that her eyes were rolling this way and that way. I could only see the white part of her eyes; her pupils had completely disappeared. The moment I noticed these signs, I knew that this was not a disease meant to be treated at the hospital. You see, I have seen many children suffering from this illness. I knew it was degedege right away, so I took my daughter to the *mganga*. . . There she started twisting her mouth

from this side to that side. Her arms and legs started shaking. She was convulsing this way and that way. She had lost all her strength . . . So I sent word for my wife to come to the mganga's house because our child's condition was very bad . . . The mganga tried different types of medicines, but in the end it was God's wish that Salama had to die. I feel very sad. The whole of yesterday night, I cried, I cried a lot.

In his narrative, Mzee Omary reveals that he had initially dealt with Salama's fever as an "ordinary fever." When the home treatment had failed, he even thought of taking her to the local dispensary. However, he associated her specific symptoms with degegede, an illness he believed is best treated by a mganga. Contrary to the cultural model where mothers make crucial decisions on behalf of their sick children, Mzee Omary consistently uses the first person "I" in the unfolding of Salama's illness trajectory, thereby implying that his wife was not present when he made the decision to take Salama to the mganga. The severity of the diagnosis required him to take immediate action and to send word for his wife to come to the mganga because of Salama's critical condition.

Case 2: Mburuane

This case highlights the sequence of events, including the context and circumstantial factors, that led a young mother to panic when her nine-month-old son became ill in the middle of the night and to rush him to a mganga. Rehema is a 28-year-old Zaramo woman who was born and raised in Mbande. At the time of the interview, she was living with her father, a wealthy politician in the village, who had supported his daughter's decision to pursue seven years of schooling and to set up a small restaurant in the village. Rehema had three children, two from her previous husband whom she divorced two years prior, and her youngest, Mburuane, from her present fiancé. Mburuane was nine months old when he died.

In her discursive rendering of the events that led up to her son's death, Rehema provided meticulous details. She was telling a story that she had told to several other people, including her two friends who were comforting her during the mourning period. Within hours after noticing Mburuane's fever, Rehema had taken him to the local dispensary, where he was clinically diagnosed with uncomplicated malaria and prescribed chloroquine injections. While Mburuane received his first shot of chloroquine at the dispensary, the doctor advised Rehema to buy chloroquine syrup and aspirin from one of the local private pharmacies and to continue to administer the medications until she could return with Mburuane to the dispensary for follow-up injections four days later. This provisional arrangement was made owing to the fact that the dispensary would be closed not only during the weekend, but also for Easter holiday (*Pasaka*). Rehema purchased all the medicines the dispensary doctor had prescribed from one of the local pharmacies and started administering the medicines to Mburuane as instructed. By Monday at about six p.m., before taking his medicine, Mburuane started vomiting. By midnight his condition had worsened. Rehema explained:

I started sponging his body with a wet cloth, but the fever wouldn't come down. I gave him aspirin again, but after some time he started vomiting. His

stomach started thrusting upward for a while, and then it stopped. He rested. I said to my fiancé, “We should go. We are alone here. What are we going to do?” He agreed, as he saw that our child’s condition was critical. While my fiancé was closing the door, I immediately felt that my son’s heartbeat had gone up rapidly; his heart was beating very fast and then it slowed down, and he started breathing rapidly. I panicked and told my fiancé, “Hurry up, the baby’s condition is getting worse.” I was so nervous that I told him to carry the baby. Actually we were both confused as to what was happening and what we should be doing. It was around midnight. He suggested that we should go to his grandfather, who is a *mganga* in the same village. As we reached his grandfather’s house, our child was shivering; his eyes were wide open, and he was thrusting his neck forward. He was breathing heavily. We were alone, myself and my fiancé.

Rehema went on to describe how the grandfather first put some medicinal leaves on hot coals to create smoke for the child to inhale. Working swiftly, he gave Rehema and her fiancé some medicinal leaves to rub on the child’s neck. They did this until his neck came back to its normal position and he coughed as a result of inhaling the smoke—a mark of recovery. The child’s overall condition, however, did not improve. Nervous about his deteriorating condition, Rehema suggested that they should go to her sister in Mbande. Her sister had experienced the febrile illness of her own child, who had been cured by a lesser-known *mganga* in the village. Rehema contacted her sister and her mother. By then it was 3:00 a.m. Together they decided to take Mburuane to the *mganga*, who said that it was too dark for him to find the right medicinal herbs in his backyard. He asked them to return with the child in the morning. By this time, Mburuane’s body temperature had fallen, but he was breathing heavily. Disappointed, Rehema and the others returned home and rested. From around 10:00 a.m. onward, several neighbors came by and tried different therapies, including massaging the child with different oils and herbs. Mburuane’s family members and others, that is, his “therapy management group” (TMG),¹² gave him different “medicines,” but he still continued to breathe very heavily. Two hours later, his condition suddenly worsened. Rehema described those critical moments:

His whole body was shivering. Sometimes only his legs were shivering. My mother was busy rubbing the medicinal leaves on him. His eyes and the color of his body had completely changed. He was now gasping for breath like he was yesterday, and froth [*povu*] was coming from his mouth. His condition continued to be like that from noon to 2:00 p.m. A few minutes later, he took his last breath. He was my third child.

Two weeks later, in a follow-up interview, Rehema asserted that she had “done the right thing” by choosing the municipal dispensary as her first resort. If it were not for the fact that the dispensary was closed during the long weekend, she would have continued to go there to complete the number of injections that the doctor had prescribed. In other words, her decision to consult a *mganga* during her desperate search for therapy for her seriously ill son was guided far more by the fact that she

did not have timely access to a biomedical health facility than by her etiological beliefs regarding the nature of her son's illness.

Case 3: Zaituni

This case highlights a situation in which the parents of a three-month-old daughter, who were dissatisfied with the diagnosis provided by the dispensary doctor, went in search of an alternative source of therapy. This decision led to further confusion and panic, and eventually the child's death. Nasla is a 32-year-old Zaramo woman who lives in Mbande with her husband, Hassani, and her three young stepchildren. She has had seven years of schooling. Previously married for five years, she has three children of her own. When her former husband divorced her and took another wife, she returned home to be with her mother. Five years later, she married her present husband, who had recently divorced his wife with whom he had three children. While Nasla's own children stayed back with her former husband, she became a stepmother to Hassani's children from his first marriage.

In March 2001, Nasla gave birth to Zaituni, a healthy baby girl. When Zaituni was three months old, she was diagnosed with uncomplicated malaria at the local dispensary and treated unsuccessfully with chloroquine syrup. Four days following the initial diagnosis, Nasla brought Zaituni to the dispensary in serious febrile condition and reported that she had experienced multiple bouts of convulsion the previous night. The head nurse did a quick blood test and determined that the baby was severely anemic; Zaituni's hematocrit or packed cell volume level had dropped down to a precariously low 25 percent. Nasla and her husband rushed their baby to the district hospital, but she did not survive.

In the interview, Nasla explained that Zaituni had no health problems until she was diagnosed with "malaria" at the dispensary and prescribed chloroquine and aspirin. After Zaituni received this medication, her condition improved a little. She was able to play as usual for two days. On the third day, however, she had a fever, one that rose quickly. Nasla described the sequence of events:

I sponged my child with a wet cloth several times over. Her body was so hot that the wet cloth would become dry in a matter of minutes, as if it was being dried on a fire [*imekaushawa na moto*]. While I was sponging her, my baby was crying continuously. No matter what I did, she wouldn't stop crying. Finally, she started convulsing and had froth in her mouth. I panicked but didn't know what to do as it was late in the night, and it was all dark!

Past experience had convinced Nasla and her husband to be skeptical about the quality of service offered at the local dispensary. Therefore, the following morning they decided to take Zaituni to one of the local pharmacists, rather than the dispensary, in the hope that her condition would improve because the medicine there would be of superior quality. Unlike at the dispensary, Nasla and her husband believed that they could get everything they needed at the pharmacy—a blood checkup, different medicines, and injections—all on credit. On examining Zaituni, the pharmacist labeled her condition as "pneumonia fever." He gave the child an unspecified injection and some other medications and further advised Zaituni's parents

to return at around 3:00 p.m. for a second injection. He scheduled a total of three injections per day for five days and had billed them for Tsh. 3,000, all on credit. After the couple returned home, the baby's condition worsened. Nasla explained:

Zaituni was gasping for breath. After a while she started convulsing and had froth coming out of her mouth. My husband and I panicked and decided to go to the dispensary, not for treatment but because we wanted to get a referral slip to go to the district hospital. The dispensary doctor examined her again and found that she had no blood in her body [*kuishiwa damu*—very low hemoglobin]. He gave a referral slip and told us to rush the baby to the district hospital immediately.

The couple followed the doctor's advice but lost an hour before finding someone who could loan them money to pay for their transportation to the district hospital. On reaching the hospital at 2:00 p.m., they discovered that the doctor was not in during this time of the day, and they waited for him to arrive. Nasla's husband frantically tried to locate the doctor, but he could not find him. The baby died in Nasla's arms while they waited. In a follow-up interview Nasla mentioned that, if the pharmacist in Mbande had advised her to go directly to the district hospital rather than taking matters into his own hands, her child would have probably survived.

Yes, I went to him for help and advice. He found that my child was seriously ill. He could have advised me to rush my child to the district hospital for further investigation. Instead, he told me to buy medicines from him, and he gave one injection to my baby just there at the pharmacy.

Asked if she would attribute Zaituni's death to the actions of the pharmacist, the dispensary doctor, or herself, Nasla replied after a long pause:

I feel that we are all to be blamed. In the first place, I was late in sending my child to the district hospital. The dispensary doctor did not tell me that my child's illness could be a serious one. And the pharmacist also made the mistake of injecting my child with some medicine, even when she did not have enough blood in her body. So we are all to be blamed for what happened.

Clearly, Nasla and her husband's decision to seek therapy for Zaituni within the biomedical domain did not result in her recovery from the illness. Further, Nasla's story involved multiple actors. By incorporating the dispensary doctor and the pharmacist in her story, she avoids singling out any particular person, including herself, for being responsible for her child's death.

Discussion

As depicted in Figure 1, these three case studies suggest that the parents' therapy-seeking behaviors or patterns of resort vary significantly despite the fact that they

Case I: Salama

Home treatment with aspirin → *Mganga* → Death

Case II: Mburuane

Municipal dispensary → Pharmacist → *Mganga* I → *Mganga* II → Therapy
Management Group → Death

Case III: Zaituni

Municipal dispensary → Pharmacist → Municipal Dispensary → Therapy
Management Group → District Hospital → Death

Figure 1. Variation in sequence of resort with same outcome.

share the same sociocultural and health environment. Nonetheless, the end result is the same—the death of the child. The implications of these patterns are significant both in terms of a theoretical understanding of health care seeking for childhood illnesses in times of crisis, and for interventions aimed at reducing malaria-related child mortalities. A culturally grounded analysis of these three cases provides a more nuanced understanding of the various treatment-seeking behaviors.

In Salama's case, at first glance, it appears that her father's cultural beliefs about degegede played a key role in his decision to take Salama to a *mganga* rather than to a biomedical health facility. However, a more contextualized analysis of this case suggests that Mzee Omary's decision was multifaceted, in that there is more to his "decision making" than just simply "irrational beliefs," "ignorance," "fatalism," "selective or benign neglect," "parental incompetence," or a decision to "let go" a child who was destined to die (cf. Larmer 1997; Scheper-Hughes 1992). Economic, structural, and microlevel social relational factors significantly influenced his decision. Mzee Omary had previous unpleasant experiences during encounters with the dispensary staff, which he had narrated to me during earlier interviews and informal conversations. He would repeatedly complain about the dispensary doctor and the user fees. He claimed that the dispensary staff often told him to come back with money when he had none and ridiculed him for insisting on being treated for an illness that they believed did not exist. These experiences had led him to believe that he would be humiliated again if he were to go to the dispensary with Salama. He believed that she would be referred to the district hospital because of the seriousness of the illness. Mzee Omary did not have the material resources to transport Salama to the district hospital or to pay for the treatment. His decision making was also influenced by the fact that he had a negative view of injections as therapy for degegede. He believed that, if one sent a child who has degegede to the hospital, the doctor or the nurse would diagnose the illness as malaria and give the child an injection, and the patient would die immediately from the high fever.

Mzee Omary's behavior was influenced not only by his cultural "beliefs" about the appropriate treatment for degedege but also by structural factors, including poverty and lack of sociocultural access to the dispensary as well as previous unpleasant encounters with the dispensary staff, which were only reinforced during his subsequent contacts with the dispensary staff.¹³

Given the WHO call for early diagnosis and prompt, effective biomedical treatment as the path that caregivers should take when dealing with childhood fevers, it would be pertinent to ask whether Salama would have survived if her father had chosen to take her immediately to the local dispensary rather than to a *mganga*. Put differently, the question is whether or not Salama died because of the nature of her father's etiological beliefs, which varied considerably from the biomedical model of "degedege equals cerebral malaria." From a biomedical perspective, it may be possible to make a persuasive argument that Salama's chances of survival would have been higher if she had been immediately diagnosed with "cerebral malaria" by a biomedical practitioner. However, as noted above, the four children that Mzee Pazi had diagnosed with degedege (at least during my fieldwork) did indeed recover from their illness. In other words, just because Salama was taken to a *mganga* does not mean that her death was a *fait accompli*. Indeed, her death was precipitated by several complicating factors. Her susceptibility to a febrile illness was hastened by the fact that she was severely malnourished and weak.¹⁴ Her impoverished parents did not own a single bed net that could afford the family some protection from infective mosquito bites. Additionally, Mzee Omary loathed taking his daughter to a biomedical facility for a number of reasons, including financial difficulty, social relational, and communication problems; his beliefs about the etiology of degedege; and the appropriateness of certain kinds of treatment for childhood illnesses. These combined factors exacerbated Salama's condition. Even when Mzee Omary realized that the *mganga*'s treatment was not having the desired effect, he did not change his mind and rush the child to a biomedical facility. The critical moment in Salama's illness trajectory had occurred long before her father had decided to take her to a *mganga*. At that point she was seriously ill, and she perhaps had already passed the possibility of recovering from her deteriorating condition.¹⁵

In Mburuane's case, his mother, Rehema, came from a relatively wealthy background, and therefore economic barriers clearly did not influence her decision-making process. Instead, her decision to take her son to a *mganga* was prompted by several other factors, including: (a) the timing and sudden onset of the illness; (b) the worsening of the child's condition in the middle of the night; (c) the closure of the local dispensary; and (d) the belief that, if a *mganga* had successfully cured her sister's child for the same illness, he would be successful in curing her child too. Rehema, however, did not rush her child to a private health facility or the district hospital immediately following the *mganga*'s treatment. Her narrative does not suggest that she was either persuaded or dissuaded by members of her TMG to take Mburuane to a private health facility or the district hospital. The circumstances surrounding Mburuane's death, then, raise a number of questions, especially whether or not the participation of a TMG in dealing with childhood illnesses necessarily leads to positive outcomes in terms of child survival. For example, in the context of Mali, West Africa, Adams and colleagues (2002:175) have argued that social networks might in fact exert a negative impact in circumstances when dangerous

health advice is dispensed and preventive action is discouraged by influential others. In the present case, on the one hand, the participation of the TMG, especially in the final hours of Mburuane's life, led to further delays. On the other hand, the community TMG may have helped to absolve Rehema and the child's father of any direct responsibility for the child's death. This was made possible by the very public nature of the diagnosis and labeling of the illness—an illness for which no one could be held responsible.¹⁶

Mburuane's case, then, powerfully illustrates the panic that ensues when parents discover that their child is not suffering from an "ordinary fever" but from a more serious illness requiring urgent medical attention. It would be overly simplistic to attribute Mburuane's death to the fact that his illness had coincided with a long weekend during which the local dispensary was closed. Rehema did not look for other options, such as taking her child to another dispensary in the private sector or to the district hospital because of her conviction that she was dealing with "ordinary malaria" as diagnosed by the dispensary doctor. She believed that it was the "unthreatening" or "uncomplicated" kind of malaria with which she had dealt on several occasions. This led her to underestimate how quickly an ordinary fever can become a life-threatening illness. Contextual factors and specific circumstances surrounding Mburuane's illness played a key role in the therapy-seeking process and the ultimate fatal outcome.

In Zaituni's case, a combination of factors precipitated her death. In the first place, the local dispensary did not have a program where an auxiliary nurse-midwife is entrusted with the responsibility of persuading mothers such as Nasla to bring their babies to the dispensary on a routine basis for postpartum and postnatal checkups. In this case, if the dispensary staff had cautioned Nasla well in advance about Zaituni's anemic condition and the doctor had diagnosed Zaituni's condition more accurately and had advised Nasla to take Zaituni to the district hospital, perhaps Zaituni's chances of survival would have been higher. In addition, the couple's negative opinion about the dispensary staff following failed treatment, and the consequent treatment-seeking trajectory on which Zaituni's TMG decided, further diminished her chances of survival. Nasla and her husband decided to discontinue the treatment at the dispensary and to take the baby to a private, unqualified pharmacist. On seeing that the baby was in a serious condition, the pharmacist did not advise Nasla and her husband to rush the baby to the district hospital. Instead, he came up with his own diagnosis and prescription. Ultimately, timing was a crucial factor in determining the outcome in Zaituni's case. Among other structural and contextual factors, including poverty, poor quality of health care, and nonavailability of effective treatment, Zaituni's case draws attention to the problem of misdiagnosis, treatment failure, and the role of unqualified practitioners and pharmacists in the unacceptable health outcomes of people living in impoverished communities.

In the child survival literature, parents of sick and dying children are often depicted as "passive, fatalistic victims of their own incompetence or as coldly and flagrantly indifferent toward the survival of their offspring" (cf. Finerman 1994:5; Larme 1997). However, as Nations and Rebhun note, "mothers' failure to obtain medical care for severely ill children is due more to real-life bureaucratic and geographical barriers to access than to fatalistic or neglectful attitudes on the part of

the poor” (1988:141). The ethnographic data along with the three cases discussed in this article provide a clear illustration of the structural constraints and cultural complexities involved in the kinds of decisions parents and caretakers make while attempting to save their children from severe febrile illnesses. The case studies in particular illustrate the need for scholars and researchers to contextualize their explanations for the differentials that are found in malaria-related child mortalities. In the present case, while the parents of these now deceased children shared the same political, sociocultural, and health environment, their access to various social and health resources, even within the same community, varied significantly. Further, as depicted in Figure 1, their patterns of resort with regard to their children’s illness were significantly different from one another. The contextual and circumstantial factors, as well as the trajectory of the illness and the manner in which the identity of the illness was continuously reinterpreted and renegotiated in these cases, were different. And yet the outcome was fatal for all three cases. How, then, might one explain these variations in therapy-seeking behaviors of parents within a community that shares a common sociocultural and health environment? What are some of the theoretical and applied implications of this pattern vis-à-vis the “global” intervention strategies that are recommended to minimize malaria-related mortalities among young children (WHO 2005:31)?

From an anthropological perspective, studies of child survival and child mortality need to highlight the manner in which health care decisions are “at once influenced by structural factors, cultural values, social roles and institutions, power relations and economic circumstances” (Nichter 2002:82; see also Jones and Williams 2004:157). The three cases discussed in this article reveal that, in addition to structural constraints, circumstantial factors including timing of the illness also play a crucial role in determining parental decision making and the illness trajectory. In the present-day Tanzanian context, parents decide to take their severely ill children to a *mganga*, not because of their cultural beliefs regarding a fear of injections but more so because of their failure to gain timely access to biomedicine that is safe, affordable, and efficacious. Further, their desire to seek prompt biomedical help is often thwarted by previous unpleasant encounters with health care professionals. I would argue that in Tanzania it is the failure of access to affordable and efficacious medicine and public health facilities that encourages people to take interest in “alternative” providers. These alternative resources include for-profit private pharmacies that are typically managed by unqualified pharmacists (Goodman et al. 2007). Evidence shows that these pharmacies are “primarily concerned with increasing profits, not standards of health in the community” (Marsh et al. 1999),¹⁷ and “traditional healers” may not always offer timely, appropriate intervention, including referral to a biomedical health facility.

In their narratives, the three parents provided meticulous details about their child’s illness trajectory, their therapy-seeking behavior, and the difficult choices they had to make to save their children. They emphasized that they were proactive and had not spared any effort to find effective treatment to save their seriously ill child. As such, they deflected direct responsibility for their child’s death by reiterating that “they had done the right thing.” Their proactive stance initially involved taking drastic action to save their children from dying. In the end, however, they accepted their child’s death as “bad luck” or “God’s will.” Such

“fatalistic” explanations are meaningful in the local context (Castle 1994:316; Detwyler 1992:31). As has been well documented in the anthropological literature, fatalistic statements are often post hoc rationalizations rather than prior restraints on struggle. They do not necessarily indicate fatalistic behavior or, more importantly, indicate neglect (Nations and Rebhun 1988:143). In this regard, Finnerman’s (1994:7) words of caution are noteworthy—that “depictions of parents as either incompetent or negligent slaves to a ‘culture of poverty,’ or to other cultural norms and values encourages a view of parents as obstacles (rather than keys) to program success.”

It is mainly through detailed, ethnographically grounded case studies that it is possible to document the lived experience of parents who have to deal with sick and dying children, and to examine the context and circumstances surrounding their child’s death. Interpretive analysis of parents’ narratives enables us to better understand how parents try to make sense of their experiences with their child’s death, and how they frame and rearticulate their experiences over time.¹⁸ Case studies such as the ones discussed in this article highlight what Nichter calls the “social embeddedness and microhistorical character of therapy management” (2002:83). They also provide key insights into the contextual and circumstantial factors implicated in child survival and child deaths. As Nichter cautions us, from an anthropological perspective:

The study of therapy management should entail not only what people do (and can do) and reasons for actions taken, but also what they are unable to do and what underlies apparent passivity, acceptance, or fatalism. Failure to appreciate this side of therapy management contributes to simplistic impressions that ignorance underlies “irrational health behavior” in contexts where other factors are involved. [2002:101]

This observation has serious implications not only for understanding the strategies that parents use to deal with children who are seriously ill but also for the cultural meanings of child death for families in resource-poor communities.

This article has highlighted the need for more contextualized data on health-seeking behaviors of the peoples of coastal Tanzania, specifically with regard to degegede. A careful consideration of the narratives told by the three parents, the context in which these narratives were produced, their living conditions, and their life exigencies all shed light on the broader social and political contexts in which people experience and deal with childhood febrile illnesses. At a time when calls for early diagnosis and prompt biomedical treatment with efficacious medicines in malaria control are getting louder (Kachur et al. 2006), the scenarios discussed in this article present additional challenges to child-survival policymakers, especially those who are involved in promoting the WHO–UNICEF mandate on IMCI. The ethnographic data in particular demonstrate the divergent ways in which parents and caretakers who share the same environment deal with an actual episode of degegede. These case studies critically query the generalization that is commonly made in the literature about the overwhelming preference among the people of coastal Tanzania to resort to “traditional healers” in search of therapy for degegede. On the contrary, I argue in this article that parents in coastal Tanzania are inclined toward resorting

to biomedical care for childhood febrile illness, provided they have access to good quality care and efficacious and affordable medicines.

It is important to recognize here that malaria does not stand alone as an isolated issue in people's lives, especially in resource-poor communities where people are confronted with other pressing concerns on a daily basis. Jones and Williams (2004:160) have noted that, to reduce the "social burden" of malaria, "we need to shift from solitary to integrated designs of interventions that are placed within the broader social, cultural, political, and economic context." Thus, a more nuanced understanding of why so many children in countries like Tanzania die from malaria calls for a greater appreciation of the fact that a particular outcome can have numerous, different causes. This idea is aptly reflected by Althusser's concept of overdetermination (Karr-Morse and Wiley 1997:182-183),¹⁹ as it refers to multiple coexistent and complexly integrated structures. As I illustrate in this article, child deaths from degedege can result from an ensemble of factors with a long list of contributing causes, which may well be different for each case. We need to broaden our understanding of the treatment-seeking behaviors surrounding culturally recognized illnesses such as degedege—and look beyond the study of beliefs about the etiology of the illness. We need to pay attention to the cultural models about the appropriateness of certain treatment-seeking behaviors and practices; to the social relations of health care decision making at the household level; to the micropolitics of communication at public health facilities; and to the role played by the private health sector in the diagnosis and treatment of childhood febrile illnesses. In conclusion, paying attention to the varied ways in which caretakers deal with actual episodes of severe febrile illnesses such as degedege can help to design locally appropriate and culturally acceptable public health interventions that are aimed at increasing child survival. Important in this regard is to look beyond "fatalistic" beliefs and explanations, take into account structural factors such as the privatization of health care in the context of poverty, and attend to the ways in which the quality of care already provided in public health facilities can be significantly improved.

Notes

Acknowledgments. Research on which this article is based was generously supported by the National Science Foundation Doctoral Dissertation Research Improvement Program (Grant No. BCS-9904347); the Wenner-Gren Foundation for Anthropological Research (Grant No. 6645:2000); Emory University, Fund for Internationalization, Dissertation Research Award (May 1999); and the Institute of African Studies, Emory University. I gratefully acknowledge their generous support. Permission to carry out this research in Tanzania was made possible by the Tanzania Commission for Science and Technology (COSTECH-Permit No. 2000-111-NA-99-100). I am grateful to Professors M. K. Leshabari, Japhet Minjas, Peter Brown, Marcia Inhorn, Randall Packard, Ivan Karp, and Dan Sellen for their wholehearted support during fieldwork and write-up. I would also like to acknowledge the constructive comments given by three anonymous reviewers, MAQ editors, and Gaston Gordillo, Joseph Weiss, Lisa Vermeulen, Nicola Szibbo, and Rachel Houmphan on drafts of this article. However, I alone take full responsibility for the information and interpretation presented here.

1. All names in this article are pseudonyms.
2. Dar es Salaam, the third fastest growing city in Africa, is Tanzania's commercial capital and the largest major urban center in the country. The current population is estimated at three million, and the metropolitan population is expected to reach 5.12 million people

by 2020. It hosts a major port on the Indian Ocean and comprises three independently governed municipalities: Kinondoni, Ilala, and Tememe.

3. The clinical manifestations of cerebral malaria or “malaria that goes into the head” are numerous. Three of the primary symptoms are (1) impaired consciousness with non-specific fever, (2) focused and generalized convulsions and neurological sequelae or dysfunction, and (3) coma that persists for 24–72 hours following a generalized seizure (see Maitland and Marsh 2004).

4. With more than a million children in sub-Saharan Africa dying from malaria each year (Snow et al. 2005), scholars and health policymakers have characterized this burden of malaria-related deaths as “intolerable.” They have mobilized efforts to halve rates of mortality and morbidity caused by malaria by 2010 (WHO 2005). The WHO has responded to this situation by emphasizing early identification and prompt, effective biomedical treatment as one of the key factors in preventing the high levels of malaria-related deaths in sub-Saharan Africa.

5. The importance of context in which narratives are produced, and the fact that narratives are generated in an intersubjective dialogic mode, has been extensively documented in the anthropological literature (cf. Duranti and Goodwin 1992; Garro and Mattingly 2000; Hunt 2000). As Ochs and Capps (1996:35) have noted, narratives are not told in a vacuum but entail an active, constructive process. Narratives are coauthored, interactional achievements between narrator and the listener. Family members and occasionally friends and neighbors were present for many of the interviews I conducted in Mbande. For example, I conducted the interview with Mzee Omary the day following Salama’s death, on the verandah of his house. His wife and their seven children, with whom I had interacted on several occasions, were huddled together behind the threshold, quietly listening to the dialogue.

6. Hausmann Muela and Ribera (2003) report that in southeastern Tanzania people believe that degegede is caused by a large, nocturnal moth that sprinkles powder from its wings onto a vulnerable child, causing the child to become seriously ill. This etiological explanation, whereby a mythic bird or a pathogenic insect is associated with an illness involving febrile seizures, is not unique to the Tanzanian context. In Mali, West Africa, Sarah Castle (1994) describes an illness referred to as *foundu*, which is akin to degegede in its presentation of symptoms, cultural interpretation, and also in its association with a winged creature—an owl that flies at night over the village.

7. People in Mbande, who identify themselves as Zaramo, make a taxonomic distinction between degegede and another illness called *kiarusi*, a similar illness that affects adults. While the symptoms of both illnesses are similar, *kiarusi* is believed to be the result of sorcery or witchcraft. It is brought on a person because another person wishes evil on the victim for reasons that may remain unknown until the patient consults a *mganga*.

8. Key informants in Mbande said that they were unaware of any particular medicine or any specific procedure that would protect a child from degegede. However, some of them mentioned that subsequent attacks of degegede in children could be prevented by using the medicinal bark of a particular tree in the form of a *hirizi* (talisman) that is tied around the child’s hip. Another particularly powerful preventative talisman is made from the bones of a rare bird that only a skilled *mganga* can identify. This talisman is believed to offer permanent protection against degegede. Protection can also be thought of only as a post facto intervention, possible only after the child has initially developed degegede and has survived the illness.

9. While some researchers have described the elaborate rituals that *waganga* in Tanzania perform to diagnose and treat cases of degegede, the fact that in the present case the *mganga* did not perform a *ramli* suggests that there is a need to appreciate that *waganga* vary significantly in their profiles, experience, and healing practices.

10. Effective August 1, 2001, the government of Tanzania banned the use of chloroquine in the treatment of malaria and replaced it with Sulfadoxine and Pyrimethamine (SP) as the first-line drug. Because of the fact that the data discussed in this article were collected during a period when chloroquine was still the first-line drug in the treatment of malaria, the discussion will be mainly concerned with chloroquine therapy.

11. In this particular case, it was Mzee Omary, not Mwanzani, his wife, who was the primary decision maker in matters related to the health of the children and the everyday management of household matters. Certainly, this was an exceptional case. The norm in Mbande is for fathers to play a minimum role with regard to children's health matters. Mothers make most of the health-related decisions, especially when it comes to dealing with a child's sickness.

12. The concept of TMG refers to "a community of persons who take responsibility from the sufferer and enter into brokerage relationships with specialists." The TMG comprises chiefly "the family members who piece together the picture of therapeutic process and decide the next step of action." The process of therapy management involves diagnosis and the negotiation of illness identities, selection and evaluation of therapeutic options, and lending of support to the afflicted (Janzen 1978; see also Nichter 2002).

13. A week after I had interviewed him, I saw Mzee Omary at the local dispensary waiting along with other patients to see the doctor. He said that he had come to consult the doctor regarding his own fever. Later, I followed him into the clinic room and made a note of the doctor's diagnosis and prescription. After receiving his prescription slip, he said to the doctor "nisamehe," meaning that he should be excused from paying the fees. The doctor became furious and started scolding Mzee Omary: "What do you mean by nisamehe, nisamehe?!" he demanded. "Why should I excuse you from paying for the medications? I can excuse patients who are really poor, not able-bodied men like you!" Feeling humiliated, Mzee Omary walked away meekly to the dispensary counter. The head nurse excused him from the prescription fee, but not before taunting him about how he had neglected his daughter and let her die, yet he had not hesitated to come to the dispensary for his own illness.

14. For a discussion on the interaction between malnutrition and children's vulnerability to malarial illness, see Caulfield et al. (2004) and Dettwyler (1992).

15. Maitland and Marsh (2004) have discussed the spectrum of pathophysiological disorders associated with cerebral malaria, especially metabolic acidosis, and subsequent death in young children in Africa. They observed that most children admitted to hospital with severe malaria die within the first 24 hours. They conclude that the majority of the children die of complications of severe malaria before they can benefit from the full effect of an antimalarial.

16. Elderly women in the village with whom I subsequently conducted focus group discussions on the topic of degedege indexed Rehema's personal tragedy to highlight their sentiments by stating, "What could she have done? It was just bad luck. It was all God's wish that she lost her child."

17. Recent studies in the East African context have examined the role of private pharmacies in malaria control and concluded that there is a need for better supervision and monitoring of prescribing practices in private sector health facilities. Alongside, there have been calls to include private drug dealers in control strategies and to provide health education through shopkeepers as a means to improve prompt, effective treatment for malaria (see Marsh et al. 1999). In Tanzania, the Tanzania Food and Drug Authority (TFDA) has initiated a program to replace small private pharmacies with accredited drug-dispensing outlets—ADDOs (for details see Kachur et al. 2006).

18. In Tanzania, calling attention to contextual and circumstantial factors in relation to child deaths is important considering the recent debates surrounding Verbal Autopsy (VA),

an epidemiological tool that involves a detailed postmortem interview with a caretaker to determine the cause of death. It has become a popular strategy to document malaria-related deaths, despite the fact that it has come under recent criticism for its limited sensitivity and specificity (cf. de Savigny 2004; Korenromp et al. 2003; Setel et al. 2006; Snow et al. 2004).

19. I thank one of the anonymous reviewers for calling my attention to the concept of overdetermination and its relevance to the analysis of child survival.

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