THE EFFECTS OF TRAUMATIC EXPERIENCES ON THE INFANT–MOTHER RELATIONSHIP IN THE FORMER WAR ZONES OF CENTRAL MOZAMBIQUE: THE CASE OF MADZAWDE IN GORONGOSA

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ABSTRACT: This article addresses the ways in which years of war and periods of serious drought have affected the cultural representations of the populations in Gorongosa District, Mozambique. In the wake of these events different cultural and historical representations have been disrupted, leaving the members of these communities with fragmented protective and resilience factors to cope effectively. Emphasis is placed on the disruption of madzawde, a mechanism that regulates the relationship between the child (one to two years of life) and the mother, and the family in general. The war, aggravated by famine, prevented the populations from performing this child-rearing practice. Nearly a decade after the war ended, the posttraumatic effects of this disruption are still being observed both by traditional healers and health-care workers at the district hospital. The results suggest that this disruption is affecting and compromising the development of the child and the physical and psychological health of the mother. An in-depth understanding of this level of trauma and posttraumatic effects is instrumental in making a culturally sensitive diagnosis and in developing effective intervention strategies based on local knowledge that has not been entirely lost but is nonetheless being questioned.

RESUMEN: Este ensayo trata de las maneras en que los años de guerra y los períodos de duras sequías han afectado las representaciones culturales de las poblaciones en el distrito Gorongosa, en Mozambique. Como resultado de estos eventos, se han trastornado diferentes representaciones culturales e históricas, dejándoles a los miembros de estas comunidades factores de protección y resistencia fragmentados para arreglárselas con efectividad. Se pone énfasis en la ruptura de madzawde, un mecanismo que regula la relación entre el hijo (1 a 2 años de vida) y la madre, y en general con la familia. La guerra, con el agravante del hambre, no les permitió a las poblaciones llevar a cabo esta práctica de crianza del niño. Casi una década después del término de la guerra, los efectos traumáticos posteriores de esta ruptura son...
observados aun tanto por los curanderos tradicionales como por los trabajadores de salud en el hospital del distrito. Los resultados hacen pensar que esta ruptura está afectando y poniendo en peligro el desarrollo del niño así como la salud física y psicológica de la madre. Una comprensión profunda de este nivel de trauma y de los efectos traumáticos posteriores es esencial para llevar a cabo un diagnóstico culturalmente susceptible, así como para desarrollar estrategias de intervención efectivas basadas en el conocimiento local que no se ha perdido del todo, aunque está siendo cuestionado.

RESUMEN: Este artículo aborda las maneras en que las generaciones de guerra y las épocas de sequías se han producido las representaciones culturales de las poblaciones del Distrito de Gorongosa en Mozambique. A la luz de estos eventos, diferentes representaciones culturales y históricas han sido perturbadas, las cuales han sido observadas tanto por los curanderos tradicionales como por los trabajadores de salud en el hospital del distrito. Los resultados hacen pensar que esta ruptura está afectando y poniendo en peligro el desarrollo del niño así como la salud física y psicológica de la madre. Una comprensión profunda de este nivel de trauma y de los efectos traumáticos posteriores es esencial para llevar a cabo un diagnóstico culturalmente susceptible, así como para desarrollar estrategias de intervención efectivas basadas en el conocimiento local que no se ha perdido del todo, aunque está siendo cuestionado.

This article aims to address the way in which traumatic events from the war and drought period in Mozambique have affected *madzawde*, the mechanism that regulates the child and mother relationship in the first two years of a child’s life. This mechanism also normalizes the relationship between the child, the family as a whole and the community. Nearly a decade the war ended (in 1992), the aftermath of these traumatic experiences are still manifest in the lives of the people in this district, in particular among young children.

Gorongosa is a former war zone with a patrilineal kinship, polygyny, and an agricultural system of production. The majority of the people lived side by side with the soldiers from one side or the other during the 16 years of armed conflict. The long-term effects of multiple and prolonged exposure to trauma have received little attention in trauma literature describing survivors’ experiences from non-Western societies. To date, trauma studies of non-Western populations have been carried out among specific population groups, mainly refugees sheltered in asylum centers in developing countries (Eisenbruch, 1991; Herbst, 1992; Hondius, Willigen, Kleijn, & Ploeg, 2000); or refugees living in camps near affected areas and under extreme social conditions (Englund, 1998; Harrell-Bond & Wilson, 1990). Two common features can be identified in the refugee-related trauma literature. First, it does not deal with the majority of war-affected populations who did not manage to escape from the war zones and were directly exposed to war and its vicissitudes for several years as in the case of the Gorongosa populations (Igreja & Riedesser 2002; Igreja, 2003; Schreuder, Igreja, Van Dijk, & Kleijn, 2001). Second, it does not address the long-term effects of exposure to trauma in the psycho-sociocultural realities of survivors (Richters, 1998). Very often, trauma studies in non-Western societies are confined to measuring the prevalence of posttraumatic symptoms at an individual level (de Jong, Scholte, Koeter, & Hart, 2000; Tang & Fox, 2001). They do not take into account the range of sociocultural differences and the way people perceive and give meaning to overwhelming experiences, and the coping mechanisms activated with or without success. In addition, very little attention is paid to the different levels of posttraumatic reaction, for instance, the ways in which society as a whole becomes disrupted. As a consequence, the cycle of psychosocial suffering does not end in the wake of a peace settlement.

In Western countries, studies on the long-term consequences of exposure to trauma have aimed to explore the potential long-term intergenerational effects of the Holocaust. No consensus can be extracted from these studies. Several have suggested that most Holocaust survivors managed to thrive (Leon, Butcher, Kleinman, Goldberg, & Almagoor, 1981), while others have shown that Second World War experiences resulted in overwhelming consequences for the survivors and their families even 40 years after the war (Schreuder, Kleijn, & Rooijmans, 2000). Studies specifically carried out among Holocaust survivors suggest strong possibilities of intergenerational transmission of traumatic experiences in which mental-health problems can be observed in the second and third generations (Bar-On et al., 1998). Another important set of studies tries to link what is known as “attachment patterns” (Bowby, 1984) and the emotional condition of the parents or caregivers as a result of trauma or loss (Crittenden, 1992; Main & Hesse, 1990). One of the conclusions from these studies is that unresolved mourning or trauma on the part of the parents may have a negative impact on the well-being of children.

The motivation for this exploratory study stems from the fact that every year in Gorongosa District there are reported cases of children in the first years of life suffering from what is today commonly termed Protein Energy Malnutrition (PEM) (Barltrop & Sandhu, 1985). In this sociocultural setting, PEM is the main cause of infant mortality. Observations made at the main health center indicate that from a total number of 197 cases of malnourished children observed there in the year 2000, 12% (n = 24) died of malnutrition. A similar tendency was observed...
in 2001. From the 196 cases observed, 10% (n = 20) of children died of malnutrition. (One of the very few types of basic statistics that can be found at the Gorongosa Health Center. Source: Annual Report, Gorongosa Health Center, Vila Paiva, 20.12.2001.) Other studies from the central region of Mozambique, in particular that carried out in Maringue, one of Gorongosa’s neighboring districts, indicate, for example, that in 1994 the rate of under-five mortality was 269 per thousand (Garenne, Cominx & Dupuy, 1996). Of these children, 22% died of malnutrition and anemia. Diarrhea and dysentery (59%) together with malnutrition problems were the most important factors causing infant mortality (Garenne et al., 1996). The high prevalence of PEM cases observed in Maringue District in 1994 could be accounted for by the fact that at the time of the study Mozambique was approaching the end of its long civil war.

The World Health Organization has defined PEM as "a range of pathological conditions arising from a coincidental lack, in varying proportions, of protein and calories, occurring most frequently in infants and young children and commonly associated with infection" (DeMayer, 1976). The available and extensive research reports on PEM do not provide a definitive answer on the etiology of this early-infant disorder. The basic etiological factor that historically provided a reasonable explanation for this problem, i.e., availability, accessibility, and quality of food for both parents and their children, is not sufficient to understand and explain the complexity surrounding infant malnutrition (King, King, & Martodipoero, 1988). A general consensus in the literature is that PEM among infants is a multifaceted problem that can be observed in different sociocultural settings and reflects an expression of varying etiological factors (Berg, 1987; Dixon, Levine, & Brazelton, 1982; Howard & Millard, 1997). Another set of studies that to some extent breaks the equation "lack of food = infant PEM" demonstrates that disrupted parent–child relationships and stressful environments are common among children diagnosed with "Failure-to-Thrive" (FTT) (Ward, Kessler & Altman, 1993) or with "disrupted attachments" (Dixon et al., 1982).

According to LeVine and colleagues (1994) a description of child care in any human population must begin with how adaptive functions such as subsistence, reproduction, communication, and social regulation are socially and culturally organized in the local environment of the child. Devereux (1985) had previously noted that the cultural representation adults have of their infants determine their behavior toward the infant, which in turn, influence their psychosocial and emotional development. In Western countries, mother–infant relationships are to a great extent influenced by the prescriptions and remedies provided by the scientific community of pediatricians and health professionals in general (Eyer, 1992), while in non-Western societies the parent–child relationship is more likely to be regulated by ancestral knowledge, which is attentively policed and monitored by a community’s elders (Collomb & Valantin, 1979). However, the question is what happens when because of the consequences of wars these gurus and guardians are no longer able to convey coherent guidelines to promote the survival of their children? In Gorongosa, there are no descriptions of child-rearing practices available; neither are there longitudinal figures on the growth and nutritional status of the population of under-fives. However, it is known that since the end of the war in 1992, this district has not faced a situation that could threaten food security. Precipitation has been regular, and with little variation—a primary condition for good agricultural production (Table 1). The absence of technical assistance between 1992 and 1995 at Gorongosa’s Agricultural District Direction did not allow the registration process for a comprehensive analysis of rain distribution. However, the distribution was almost the same as in subsequent years.

Gorongosa is considered to be the granary not only of Sofala Province but also of other Mozambican provinces because of the quantity of food produced and sold every year in this district at the end of the second harvest. ("We produce food in such quantities that every year..."
there are many lorries that come here from Inhambane and Gaza provinces to buy maize in large quantities.” Planning Technician, Gorongosa District Department of Agriculture, interview, 15.08.2000.) It is suggested here that the multiple and prolonged exposure to trauma faced by the Gorongosa population not only severely damaged people’s psychological health but also affected and disrupted their cultural and historical institutions, and systems of values and norms. Particular focus is given to madzawde, a mechanism that regulates the infant–mother relationship in the first two years of life. The results of this disruption are still being observed and are contributing to continued psychosocial suffering particularly among children and their mothers.

For this exploratory study the following questions were raised: (1) if food security (Reutlinger & Selowsky, 1976) is guaranteed, i.e., is no longer a threat for the majority of the population in Gorongosa District, why are there children still suffering from PEM in the first two years of life? (2) What aspects of the parents’ treatment of their children may influence the children’s health? Is there any relationship between the child-rearing practice known as madzawde and the causes of PEM? In which way can the structure and dynamic of madzawde be described and analyzed? (3) Is there any relationship between the war experiences that the parents went through and the etiology of PEM in this postwar period in Gorongosa? Is there any relationship between the disruption of madzawde and PEM? (4) Is there any relationship between PEM symptoms observed in the children arriving at the district hospital with those seen by traditional healers and considered to be the posttraumatic effect of the disruption of madzawde? (5) How is it best to intervene in the context of a cultural disruption? How can projects be designed that are culturally sensitive and address the real causes of this problem?

METHODOLOGY

Participants

The participants in this research were very diverse, allowing a broader exploration of the aftermath of prolonged and multiple exposure to experiences of war in a rural and remote society.

A group of 94 women who had brought their 94 malnourished children to the main health center in Gorongosa District participated in the study. After an initial diagnosis of the child’s health by a doctor, all the women were invited for an in-depth interview. A group of 15 male and female traditional healers (N = 15) from different communities provided data on the different local healing resources and mechanisms available to deal with a variety of health problems including the disruption of madzawde.

Ten representatives of the traditional authorities and one religious leader participated in the research by providing oral historical and sociocultural accounts of their people and zone.

### TABLE 1. Pluviometer Registrations or Atmospheric Precipitation (mm) 1997–2000

<table>
<thead>
<tr>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
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<th>Sept</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
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<tbody>
<tr>
<td>1997</td>
<td>641.2</td>
<td>384.6</td>
<td>—</td>
<td>81.9</td>
<td>0</td>
<td>47</td>
<td>51</td>
<td>0</td>
<td>63</td>
<td>85</td>
<td>122</td>
</tr>
<tr>
<td>1998</td>
<td>373.6</td>
<td>0</td>
<td>49</td>
<td>51</td>
<td>—</td>
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<td>—</td>
<td>13</td>
<td>33</td>
<td>11</td>
<td>45</td>
</tr>
<tr>
<td>1999</td>
<td>195</td>
<td>239</td>
<td>107</td>
<td>72</td>
<td>26</td>
<td>13</td>
<td>33</td>
<td>20</td>
<td>65.5</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>2000</td>
<td>206</td>
<td>159</td>
<td>140</td>
<td>29</td>
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<td>18</td>
<td>18</td>
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</table>

Source: Gorongosa’s Agricultural District Department, Vila Paiva, Gorongosa, 15.08.2000.
of control. They also provided data on the war and postwar experiences and changes registered in cultural patterns.

Ten elders (five male and five female) participated in this research to complement the data regarding the historical and cultural context of Gorongosa populations.

Five health workers at the Gorongosa Health Center, including the director, were interviewed regarding the diagnosis of the 94 malnourished children. We explored their experiences in treating parents and their malnourished children, their perceptions of the causes of PEM, and the strategies they apply to deal with this problem besides the interventions carried out at the Nutritional Rehabilitation Center based in the same health center.

One representative of the agricultural district office was interviewed regarding food production and security, and patterns of commercialization of surplus.

**Instruments**

The main method used was interviews. In-depth interviews with the mothers of the malnourished children cover the following topics: (1) demographic characteristics of the mother and child; (2) the history of child sickness; (3) the mother’s physical and psychological health; (4) the availability of food in the household; (5) birth intervals; (6) the time frame of weaning; (7) the present practice of *madzawde*, time frame, and its consequences; (8) gender relations in the daily routine of the community; (9) sexual intercourse and traumatic experiences during war and drought, and taboos surrounding the period of pregnancy and associated activities; (10) domestic and community violence; (11) the relationship between younger and older people; and (12) health-seeking behavior.

For the sample of traditional healers and chiefs, religious leaders (Catholic and Protestant) and elders, we conducted individual and collective in-depth interviews focusing on (1) war and drought experiences; (2) individual and community oral life histories; and (3) cultural practices, rituals, and ceremonies that regulate life in different age periods and respective developmental tasks.

Focus-group discussions (mainly groups of male and female elders) were held to talk about war and postwar experiences and the changes that were believed to have occurred in the most important cultural practices, in particular *madzawde*. Self-reports were given by primary and secondary school teachers on the war dynamics in Gorongosa District, and family and personal experiences.

**Analysis**

The data collected from the 94 women were used to make a closer analysis of the extent of the traumatic experiences and their long-term effects on child-rearing practices (*madzawde*) which in turn, influenced the condition of the children diagnosed with the symptoms of PEM.

The data provided by traditional healers and chiefs, religious leaders, elders, primary school teachers, and health workers were used to provide an in-depth analysis of the following: a careful historical reconstruction of child-rearing practices, in particular *madzawde*, the local dynamics of war and drought; a list of traumatic events experienced by the majority of people in Gorongosa and the aftermath of these experiences; the different developmental stages and tasks; continuities and discontinuities in social and cultural ways of living; the types of nutritional deficiencies, and the symptoms of the malnourished children brought to the health center for treatment; and the interventions applied both at the hospital and in the communities.
RESULTS

The preliminary research results suggest that the effects of the war and intensive drought had a serious negative impact on madzawde, and consequently, the child (one to two years old) and the mother are still suffering. All the women (N = 94) were countrywomen living in different communities of Gorongosa district. They did not have any formal educational background. Their mean age was 26.4 (SD = 8.46), although it is always difficult to determine the exact age of the women. All participants in the study were exposed to long-term war and drought experiences. For the majority of women’s narratives the whole context of violence but in particular of Gandira (described below) seems to be a very difficult experience to work through. The majority (96%) was married. 53% belonged to a monogynious type of family while 47% belonged to a polygamous. The mean number of living children was 2.8 (SD = 1.7). The mean number of dead children per woman was 1.8 (SD = 2.4). Twenty-five percent of the mothers lost one child and 32% lost more than two children. Seventy-three percent of the women reported not to suffer from a major physical health problem, while 23% reported health problems. However, all the women reported suffering from chronic headaches, sleeping problems, and bad dreams. These results are consistent with the data collected from a community-based random sample in Gorongosa district. Of the study group (n = 406), 63% (n = 257) suffered from bad dreams and other symptoms of posttraumatic reactions (Schreuder et al., 2001).

From the 94 children, 86 were observed (n = 8 missing values). Forty-three percent (n = 40) were girls and 49% (n = 46) were boys. Their ages ranged from 11 to 30 months. Seventy-seven percent (n = 66) of the children were diagnosed with Marasmus, 16% (n = 15) were diagnosed with Kwashiorkor, and 7% were considered severe cases.

CHILD REARING CONTEXT: MADZAWDE

The in-depth interviews, focus-group discussions, and self-reports allowed a detailed emic reconstruction of madzawde practice prior to and after the years of war and drought. Contrary to the observations made by Robert LeVine and colleagues (1994) among Gusi mothers, Gorongosa survivors in general overtly describe the practice of madzawde as an important mechanism to protect and promote the survival and health of their children in the first years of life. The structure and dynamic of madzawde are described including its benefits to the child, the mother, and the family in general.

Before the war when a baby was born in Gorongosa, s/he was considered to have madzawde. The mother had to breastfeed the child for two years, and during this period the mother also used the breast for comforting the child. Breastfeeding within this context meant an intimate relationship (in bed and while being carried on the back) so that she could even toilet train the child interactively at the same time. This symbiosis unconditionally guaranteed by madzawde created the environment for the mother to socialize the child, providing comfort, warmth (when evenings are cool), and preventing disease. Two years after the birth of the baby the parents had to perform a very important ritual called madzawde to end this period. The madzawde ritual had to be performed because, after the two years, the child was once again in a vulnerable condition vis-à-vis socioenvironmental pollution. The ritual marked the point of rupture of the child–mother symbiotic relationship and allowed the woman and her husband to reestablish their sex life. If the parents fail to perform the ritual or if they do not perform it as prescribed, the child could get madzawde or phiringaniço. In such cases madzawde or phiringaniço is a set of physical symptoms that affect the child and could lead to death if
treatment is not provided in time. When a traditional healer determines that the etiology of the child sickness comes from a break in madzawde practice, it is said that the child has phiringanico. The condition of phiringanico means that the baby’s parents and the people in the vicinity failed to perform madzawde properly, i.e., ku phiringanika. In general terms, madzawde can be understood as: (1) a mechanism that regulates the relationship of the child with the mother, the family in general, and the community; (2) the cultural, social, and historical recognition of the vulnerabilities of the child in this particular developmental stage and the need to create a safe and protective environment that can guarantee his/her harmonious physical and psychological growth; (3) a ritual that is performed two years after the birth of the child to release him/her from it and to close the first stage of childhood; and (4) the establishment of a new life-cycle for the parents and the process of preparation of new offspring.

Madzawde is rooted in a deep cultural knowledge and understanding of the child’s development in the first years of life, which was accumulated historically and transmitted from one generation to another over a long period of time. In principle, the practice of madzawde was conceived to guarantee the process locally designated as ku koia muana, which means “to keep and to take care of the baby until she reaches the appropriate age.” (Interview with Catholic priest, 21.04.97 and 13.08.2000, and Protestant pastor, 21.04.1997.) Similar types of child-rearing practices have also been observed in other parts of the African continent (Varkevisser, 1973).

The Structure, Dynamic, and Functions of Madzawde

The structure. The structure of madzawde includes nine elements where the child is at its core. The structure could be divided in five parts: (1) human beings: the child, biological parents (mother and father), family in general, community, and nhamuino (midwife); (2) nature: leaves of trees and ussembe (maize husks); (3) place of reproduction and birth: hut; (4) Oral testimony: Ku pukuta; (5) Madzawde bin (Figure 1).

The nine elements in the structure have a relevant role to play in the protection of the child against her vulnerabilities and to guarantee her balanced psychological and physical development in this period.

The dynamic. In the structure of madzawde all the elements are related to each other. The dynamic of this mechanism is based on the principle that every single element has a specific role to play and they cooperate with each other to fulfill the rules and expectations of madzawde. After the birth, the mother should abstain from sexual relations with her husband for a period

<table>
<thead>
<tr>
<th>FAMILY &amp; COMMUNITY</th>
<th>PARENTS: MOTHER &amp; FATHER</th>
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<tbody>
<tr>
<td>HUT</td>
<td>CHILD 1-2 YEARS</td>
</tr>
<tr>
<td>NHAMUINO (MIDWIFE)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ELEMENTS OF THE NATURE</td>
</tr>
<tr>
<td></td>
<td>Ku pukuta</td>
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<tr>
<td></td>
<td>11. Heroin, murodo</td>
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<tr>
<td></td>
<td>&amp; dzade</td>
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<tr>
<td></td>
<td>(a coarse maize husk)</td>
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Figure 1. The structure, dynamic, and functions of madzawde.
of two years. During this period there is a strict set of rules that everyone within the family and the community must follow to preserve the integrity of the madzawde period.

After two years, the child’s parents and the nhumulo (midwife) prepare a ceremony to mark the end of the madzawde period. The parents and the child go inside the hut and the nhumulo (midwife) comes and kneels near the door of the hut to do ku shikubu (see below). For this, the nhumulo uses some natural elements including the leaves of two different trees (muroro and dzawde) and a few ussembe (maize husks).

Although the nhumulo is still kneeling down, she begins to do ku shikubu, a narrative process of giving oral testimony of the most important events that have happened in the child’s life since his/her birth. This retrospective narrative is given while the nhumulo touches the ussembe placed in the two leaves (muroro and dzawde) and she says the following words: “I am the one who helped your baby on the day of birth... I was the one who used to touch this baby... Your baby is here, the maize is here, the leaves are here and I came to deliver the madzawde of your child...”

When the nhumulo finishes doing the ku shikubu, she gives the maize placed in the leaves to the parents. They receive it, place it under their mat, and then they have sexual intercourse to complete the ceremony and madzawde. After intercourse, the parents have to gather all the clothes and equipment that they used to nurse and care for the child and throw them away in the bush. The location is then designated as the child’s madzawde bin, and no family member may touch or pass near the bin otherwise contamination is believed to take place putting the child’s health at risk. When these prescribed steps have been integrally performed and fulfilled, the child should not become ill, and her/his development is considered to have been balanced and another age period begins.

The functions. The functions of madzawde can be observed on three levels, namely for the child, the mother, and the family in general.

For the child.
1. Determines the role and place of the child within society;
2. Increases the degree of relationship and contact with the mother because all her energy and love is devoted to the child in this period;
3. Creates a safe environment for the processes of emotional, psychological, and physical development;
4. Protects the child against his/her own vulnerabilities;
5. Protects the child against disease;
6. Reduces the risk of child mortality;
7. Protects the child against early weaning; and
8. Protects the child against malnutrition and, consequently, against physical developmental problems.

For the mother.
1. Protects the mother against very short birth intervals;
2. Gives enough time for the mother’s body to recover the energy, minerals, and other nutrients lost during and after pregnancy (Balldin et al., 1991; Ebrahim, 1989);
3. Protects the mother against physical and emotional saturation caused by very short birth intervals;
4. Maintains respect for the mother in the community;
5. Protects the mother against rapid aging;
6. Reduces the risk of maternal death; and
7. Protects the mother from psychological distress due to difficulties and conflicts surrounding the identification of causes of childhood sickness in this developmental stage.

For the father and family in general.
1. Protects the father from psychological distress due to difficulties and conflicts surrounding the identification of causes of childhood sickness in this developmental stage; and
2. Gives the opportunity for better family planning, allowing a measured decision based on considerations of the costs involved in the birth and raising of a child. The two-year time frame allows the parents, in particular the husband, to spend what are usually minimal savings on one child at a time, making it easier to provide for the needs of the child in this developmental stage, as well as the needs of the mother.

For the community.
1. Increases the cultural identity of the community by providing a common framework of thought, way of living, and expression of social responsibility vis-à-vis the survival and development of the newborn baby;
2. Prevents conflicts through the fulfillment of the established set of rules and obligations toward the child; and
3. Guarantees the reproduction of new members of the community.

Rules.
1. The mother of the baby cannot have sexual relations with anyone during the period of madzawade.
2. From the day of the birth of the baby until her umbilical cord falls off, the mother of the baby cannot meet other women or eat with them.
3. When the parents want to close the period of madzawade, first the nhamuino has to do ku pukuta. Then, they are free to have sexual relations but they cannot do so without first doing ku pukuta, or the child will become ill. Ku pukuta is one of the key elements in the madzawade ritual.
4. When the parents of the baby are having sexual intercourse (to close the madzawade ceremony) while the baby’s clothes are outside the hut, it is forbidden for the child to wear these clothes on the following day otherwise the baby will get diarrhea.
5. After performing madzawade the parents must throw away all the clothes that the child was wearing before the ceremony. If someone touches these clothes and then touches the baby, the baby will get sick.
6. The baby’s father cannot have sexual relations with a woman who is not his wife, or the baby and his/her mother will become ill during the madzawade.
7. The father of the baby can only have sexual relations with one of his wives (in the case
of polygynous families) with no consequences for the madzawde of the child and his/her mother.

8. No one in the community can touch the baby if s/he has recently had sexual relations or the baby will become ill.

9. The father’s other wives cannot touch the baby if they had sexual relations the previous day. If the baby gets ill, the parents have to consult a traditional healer to do what is locally designated by ku dembula or ku punganidza, i.e., to confess the bad things that the parents did vis-à-vis their sick baby.

It is believed that if these culturally prescribed rules and norms are violated or ignored, the child and the mother will suffer. The madzawde system is based on the principle that the environment is polluted and the child is very vulnerable in this period of his/her life. Pollution from the environment represents a permanent threat to the child’s health and survival. The integral fulfillment of this complex and vital ceremony is intended to ensure a safe and peaceful social environment. The practice of madzawde was much more difficult during the long years of war and the intense period of drought in Gorongosa. The permanent lack of physical security that required a constant struggle to survive and to remain alive prevented many people from respecting and performing the associated rituals of madzawde. Several women with malnourished babies stated that:

Our parents say that many babies died during the war and drought because it was not possible to protect the babies with the madzawde tradition. No one could follow the traditions of our ancestors and the babies were dying like flies. One baby is born today and tomorrow dies . . . born today and tomorrow dies . . . Madzawde was a long tradition left by our ancestors on how to care for our babies but nowadays there are many problems with this tradition. (Interviews with informants, 10.08.2000, Gorongosa Health Center.)

TRAUMA CONTEXT: WAR WITH COMPLICITY OF DROUGHT

Gorongosa District was a war zone that became famous for the intensity of conflict within its boundaries. The violence and sociopolitical unrest lasted for almost three decades, with the war for independence lasting from 1964 – 1974 and the civil war from 1976 – 1992. The national military base of the Renamo guerrilla army from 1981 to 1985 was based in this district and from the first signs of war in 1976, the district was divided between areas controlled by Renamo and the government. The population was governed by the particular regime under which they lived during the conflict. In Renamo-controlled areas the people were living in their madembes, while in government areas the people were living in communal villages. [The concept of Madembe represents a system of living and organization that has a specific cultural meaning and historical roots. Madembe means someone’s place of residence for at least four generations. Hence, it can also be called an “old residence.” The people live in their own yards (kraals) widely separated from each other. The presence of fruit trees within the yard is one of the most symbolic signs of a madembe.] However, the common denominator in the two organizational systems was that people suffered traumatic experiences.

The philosophy of war of both the armies was that the civilian population living under the control of one of the armies was to be treated as an enemy of the opposing side. The philosophy was based on the principle that within the war zones there were no civilian populations (in fact, the only visible distinction between civilians and soldiers was based on the fact that the
former did not have uniforms or weapons) a principle that can be illustrated by a military proverb that states that: “If someone has a pot that he likes very much and then a snake gets in, what does the owner do to kill the snake? Even if the owner likes the pot very much, he will have to destroy the pot to kill the snake.” (As recounted by two informants, joint interview, 27.08.1997, Vila Paiva, Gorongosa.) This principle shaped the way in which the soldiers dealt with the civilian populations living under the control of one or other side in the war.

The majority of the people from the different communities in Gorongosa can be classified as “people directly affected by war and hunger (PDASHW).” [For the purpose of this ongoing work, this classification is based on the following criteria: (1) to have lived within war zones during the 16 years of civil war intercalated by drought and subsequent hunger; (2) to have lived in the communal villages or in a madenhnos side by side with soldiers; (3) to have been used in different ways as part of the strategy to support the war efforts of both armies; (4) to have been militarized and deprived of freedom of movement; (5) to have been deprived of cultural expression; and (6) to have been forced to hide in holes for shelter.] They were neither refugees nor displaced people, and they spent 16 years of civil war living within war zones and running from one place to another in a vain attempt to find a better hiding place. In a randomized community sampling, most of the people living in Gorongosa meet the “Criterion A” of the DSM-IV (American Psychiatric Association, 1994; Shreuder et al., 2001).

Traumatic events experienced by Gorongosa survivors during the years of war and drought can be described qualitatively as follows (Igreja, Kleijn, Schreuder, Van Dijk, & Verschuur, in press): lack of food, water, shelter in the combat situation, and loss of goods; near-death experiences; becoming ill without any medical care; forced separation from others; disappearance or kidnap of a family member; experience of being kidnapped; exposure to ambushes; murder of a family member or friend and physical torture; experiences of threat of execution and of torture; not being able to work in the field and loss of their land; being struck on the head; being seriously injured; being forced into isolation; experiences of fainting; experiences of imprisonment; witnessing the murder of strangers; and experiences of rape or sexual abuse.

Other traumatic events include being forced to carry out Gandira—a war management system established to support and guarantee Renamo war efforts. The key element of this system was that the civilian populations were used without their consent to perform two main tasks: (1) to produce and supply the soldiers with food; and (2) to act as carriers of military armaments and food (Igreja et al., 1999). Being forced to live inside a communal village, the people had to resort to living in holes for shelter. (In 1985, when the war was very intense in the government-controlled areas, one of the survival strategies instituted by the government soldiers was to order the people to open holes in the ground to use as shelters and every time people heard shots they had to run and hide inside these holes.) Without being able to enter cemeteries regularly to bury their dead, people were unable to perform Ntsanganiko—a complex and long ceremony surrounding death and loss that ends with sexual relations between a couple belonging to the family of the deceased. Ntsanganiko is also a concept used to designate a constellation of physical symptoms resulting from the breaking of this ritual of passage (Igreja et al., 1999). Without a safe and peaceful environment it was extremely difficult, if not impossible, to perform the madzawde ritual during the years of war and drought and to put in practice the historical and cultural homeostatic mechanisms that regulate the way of life at different levels. It was similarly difficult during the years of severe drought when it was not possible to grow crops. There was neither food nor water, and the people were forced to move frequently from place to place within the war zones to look for any water and scraps of food to stay alive. These movements were risky because as soon as the soldiers from the opposite side caught someone they would accuse him/her of being capricornio (meaning, traitor) and the person could be killed. (An expression used mainly by former Renamo soldiers to designate
a civilian member of their controlled area accused of being a spy. Usually the person given this label was condemned to death.)

“Against Hunger There Is No Medicine”

This expression was used by a local informant to refer to the fact that in some cases hunger was so serious that there was no escape from death. There was no medicine available to fight against hunger, i.e., there were no effective mechanisms to cope with this experience. (Informal talk, 20.10.1999. Vila Paiva, Gorongosa.) There were very few mechanisms available for coping with the drought and subsequent hunger. The populations had no safe choices. On the one hand, if someone moved from one place to another to look for food and water he was putting his life at risk because as soon as he was caught he could be publicly humiliated, tortured or executed by the soldiers. On the other hand, if people did not go to look for scarce food and water they were condemned to die of hunger and thirst. In some cases, the thirst was so bad that the people had to drink their own urine as a coping strategy to remain alive:

When the Zimbabwean airplanes began the bombardments we ran away, and along the way we began to drink our own urine because there was no water in the Nhadue River. There was no water to drink. We began walking in the morning, until in the evening and on the following day we did the same thing. We were just walking to run away and there was no water. Other people fainted along the way. Other people were dying because of thirst so we decided to drink our own urine. I could not stand anymore and there was a time that I wanted to leave my children behind but my husband said that I should not do it, he forbade me to do it. I was carrying two children and one was on my back. Each person was drinking his/her own urine. My children were drinking my own urine . . . (Interview, 13.10.1999, Nharoi-Vunduzi, Gorongosa.)

Within this context of extreme violence provoked by the war, and hunger and thirst at the same time, the everyday lives of the people were just occupied with the struggle to survive and trying to cope with the idea that death was almost inevitable. Civilians were regularly caught in the crossfire.

TRAUMATIC EXPERIENCES AND MADZAWDE

The inability to fulfill cultural obligations, values, and norms, in addition to the presence of war and drought, constituted in itself a traumatic experience with serious repercussions during and after the war. There was no peace, no food, no water, no shelter, and as a result, the basic structure of madzawde practice was fragmented. This traumatic situation increased the psychological distress of parents, and to offset the rapid destruction of madzawde practice they were forced to introduce changes in its structure. For a long time, it was difficult to perform this regulating mechanism as it was culturally prescribed. The different key informants — men and women including traditional healers and authorities — asserted that:

We had no home in which to do the madzawde ritual . . . During the war there was no time to do it, we were just running away from one side to another looking for a safe place to hide . . . When the war intensified we stopped doing it and because of the war we left this tradition . . . The war changed many things in our lives . . . We could not do the madzawde ritual in the communal village because we were many people living in the same
Inside the communal village people used to die as if they were rats and it was not possible to do our ceremonies there... We were asking all the time “how will our children survive if we don’t have the chance to do the madzawde ritual?” That’s why many children died during the war, they were dying of illnesses caused by madzawde practice... Since we were forced to stop doing it during the war we did not continue after the war... For those people who are still doing it they do it in a different way; it’s not the real madzawde practice... (Field notes, Gorongosa, 1999, 2000)

The posttraumatic effects of the disruption of the madzawde practice are still being felt both by the traditional healers and by health workers at the district hospital. Because of traumatic experiences, people were forced to leave behind this regulating mechanism, resulting in a posttraumatic aftermath comparable to what Eisenbruch (1991) termed “cultural bereavement.” This kind of traumatic experience resulting from the inaccessibility of culturally appropriate defense resources in crisis and postcrisis periods are rarely considered in psychotrauma literature.

The consequence of the inability to perform the madzawde ritual during the war and drought period was that the people ended up abandoning this vital practice. Today, if they still perform it, there have been changes in its initial structure and dynamic, which raises serious questions regarding its present validity and effectiveness. In this sense, there is no consensus among Gorongosa people about whether madzawde practice is or is not still protecting the interests of the child and the balanced continuity of the lineage, as it used to in the past.

CLUES TO THE DISRUPTION

When the women (N = 94) were asked about the practice of madzawde, almost 47% reported performing it while 53% do not perform madzawde as a child-rearing practice because of religious beliefs or simply because their family stopped the practice during and after the war. For the women who still carry on this practice, the mean time of duration of madzawde ranges from three to 7.5 months. Compared with the previous duration of madzawde this means a reduction of 17 to 21 months. Sexual intercourse after the birth of a child no longer occurs after 24 months of sexual abstinence as it used to in the past. This new pattern of madzawde also influences the time frame of birth intervals. Almost 30% of the women got pregnant again after performing madzawde three to seven months after the baby’s birth. Regarding availability of food in the household, 86% of the women reported that food was not a problem in their households. Nearly 14% of the women reported cases of domestic violence perpetrated by their husbands because of the women’s refusal to perform the madzawde ritual soon after the birth of the baby.

These results suggest that the cases of PEM observed in Gorongosa’s infant populations are not caused primarily by food insecurity or shortage of food. The etiology of infant malnutrition stems from the disintegration of madzawde practice. The two-year time frame that used to regulate the crucial growth period of the child is no longer the same. Among the parents that still perform the ritual of madzawde, the changes that occurred within its structure and dynamic no longer guarantee the protection of the child and the mother. One effect of this cultural disruption is that the intervals between births are very short. If in the past, madzawde practice was one of the most important pillars of infant development and well-being, madzawde has currently been transformed into the main source of infant–mother conflict, with a complicated aftermath for both. Also, the main question is why survivors of the war in Gorongosa, in particular the new generations, have changed the time frame of validation of madzawde.
There was a general consensus from all respondents, particularly from the groups of elderly and traditional healers, that in the past it was possible to extend the madzawde period over two years or even more. In the past there was a shared belief in communities of the vital need to respect and strictly observe the rules and norms pertaining to most of the traditions. They often told me:

In the past, children did not use to die like they die nowadays. Everyone respected madzawde and we trusted each other about it. Now, no one trusts each other, and we are afraid of each other’s behavior. Everyone lives according to the way he wants. That’s why these days it’s very common to see very thin children, they do not grow properly, and it’s very difficult to have many children . . . (Interviews and focus group discussions.)

The disintegration of madzawde stems from the fact that society has changed. It is believed that the levels of “pollution” in society are very high as a result of the prolonged years of violence. If someone leaves a baby for a long time without performing the ritual of madzawde, the child runs a high risk of being “polluted” by the people in the family or in the community. Consequently, the child may become very ill. The only way to avoid the baby’s contamination is to perform the madzawde ritual as soon as possible. One of the effects of violence at the cultural level was the transformation of madzawde into a double-edged sword: the parents that still try to follow traditional practices need madzawde to protect their children. But when they perform the madzawde ritual and the mother of the baby gets pregnant again, they potentially contribute to damaging the health of the very baby that they are trying to protect.

If the baby’s mother gets pregnant again as early as three months after the birth of one child, she loses the capacity to take care of that baby fully. Short intervals between births and the vital need to breastfeed a newborn child result in a deep infant–mother conflict. This conflict is exacerbated by the cultural principle of ku wa muira that forbids a woman to breastfeed a newborn baby if she is pregnant with a second child. Several health workers from the Gorongosa Health Center asserted that:

The idea and practice of ku wa muira is so deeply rooted within the way of life of the people here in Gorongosa District that we don’t know yet from where to start. We are giving as much information as possible to them but up to now it does not seem to bring good results. (Director of Gorongosa Health Center and colleagues. Interviews: 10.06.97, 11.11.98, and 08.08.2000, Vila Paiva, Gorongosa.)

Religious leaders (without exception) who were educated at Catholic and Protestant schools told me vehemently that they did not believe in the practice of madzawde. However, they were certain that the milk of a pregnant woman was poisonous for a newborn infant, i.e., they believe in ku wa muira. (Interviews with Catholic priest, Mapombwe, Vila Paiva, 13.08.2000.) Because of the belief in ku wa muira, the mother is not allowed to continue breastfeeding. It is said that in such circumstances the baby is using the milk of the fetus and the child can get sick. To prevent any kind of contamination, the mother must stop breastfeeding the child prematurely, but there is no proper protein-rich food to replace the breast milk. Several anthropological observations have reported similar phenomena. Collomb and Valantin (1974), working in Dakar, observed that the blame is placed on the child who is accused of hostility toward his future sibling and of drinking the milk of the pregnant mother that is being reserved for the new baby. Among the Chagga in Mount Kilimanjaro women said that breast milk was bad for a child once the mother became pregnant (Howard & Miller, 1997). In Gorongosa, the...
cultural practice of *ku wa muira* unleashes a set of physical, psychological, and emotional reactions that can have a serious negative impact on the child’s nutritional status and health. The feeding periods of the child become irregular, the child becomes stressed and cries most of the time. When the parents try to give the child something else to eat, the child eats but then vomits, and then gradually becomes weaker. The clues to this disruption is illustrated in Figure 2.

From the 53% of mothers that declared they no longer followed the practice of *madzawode*, 28% had children with symptoms of PEM. The PEM cases among their children stem from the fact that very often when the menstrual cycle does not resume after the birth, it is believed to be related to breastfeeding. Mothers and society in general believe that the only way to restart the menstruation cycle is to stop breastfeeding. In addition, although these women stated that they no longer practiced *madzawode*, they do, however, strongly believe in *ku wa muira*. If they get pregnant after resuming sexual relations, they immediately stop breastfeeding, and the most striking thing is that parents do not realize that a baby gets ill not because of breastfeeding while the mother is pregnant but because of the abrupt weaning and early introduction of inappropriate solid foods.

**DISCUSSION**

*The Long-Term Effects of War and Drought: The Etiology of the Disruption . . . “Now we are already whites . . .”*

The aim of this exploratory study was to obtain data that could provide insight into the high prevalence of PEM cases among under-fives in a society where food security is apparently guaranteed. These findings show that historically and culturally Gorongosa people had a very functional and complex system of child-rearing called *madzawode*. This cultural representation aims to protect newborn members of the group and promote their healthy and balanced development. However, prolonged and multiple exposure to war, drought and famine disrupted not only individual lives but also an ancestral system of values and norms, entailing tremendous implications for child-rearing practices, and in particular for *madzawode*. Ten years after the end of the war this study provides some preliminary evidence that there is a strong correlation between the long-term effects of war traumas, the disintegration of *madzawode* practice and its present dysfunctional role, and infant ill-health and mortality.
The traumatic experiences of war and drought have brought dramatic changes to patterns of sociocultural and family organization. Given human beings’ dependence on culture, its loss, or deprivation can become traumatic (Devereux, 1980; De Vries, 1996; Eisenbruch, 1991). The many years of sociopolitical, economic, and cultural crisis have disrupted important aspects of the sociocultural identity of Gorongosa people. Psychological as well as sociocultural disruption as a result of war and exposure to violence among the same individuals and their communities has been identified in other regions of the world (Perera, 2001; Zar, 1998). It is in this way that war survivors in Gorongosa identify and explain the consequences of their traumatic experiences in the wake of war, drought, and famine. The consequences of these traumatic events are culturally construed, interpreted, and explained within the context of modifications that were registered in the cultural and living patterns of the families and community as a whole. If the most important regulating mechanisms from birth (madzawode) to death (ntsanganiko) are no longer functioning as they used to, the people attribute the causes of these disruptions to the events that occurred during the civil war and the drought.

The phrase commonly used “now we are already whites” expresses the posttraumatic effects at the cultural level. “To live like the white people” is a common expression that the people in Gorongosa use to mean that they have changed in a negative way. In particular, it means that they are no longer practicing their traditions as in the past, thereby becoming more like “whites” who have never practiced such traditions. The people have adopted new ways of living, which appear to be creating social tension and confusion among community members, in particular the young people. It is within this context that the etiology of PEM should be in part understood.

Lachal and Moro (2002), working amidst the Israeli–Palestinian conflict, demonstrate that if the mother–child relationship is disrupted, especially if the mother experiences posttraumatic problems, children may be affected. This study shows that this is also the case even when the violence has longer terminated. The violence in Gorongosa upset and fragmented the cultural representations society has regarding rearing of their infants. This is observed through the fact that a great deal of people no longer engage in madzawode and those who do no longer respect many of the features of the system that were once regarded as crucial. There is a belief that the war polluted the environment to the extent that they cannot trust even close relatives. To raise a child is no longer a communal affair. This has particular implications for children’s survival and well-being in light of emic theories of causality in illness and recent demographic trends.

In regard to exegeses of some illnesses, there is some ambivalence in relation to the role of coitus. It is believed that in some cases coitus is a dangerous vehicle of social “pollution” and in others it is a cleansing mechanism. It is believed that people have “hot blood” after the coitus and that this is a source of “pollution,” extremely dangerous in particular for babies who have not passed through the rite of madzawode. Another dangerous pollutant for the baby may also come from people who have entered the cemetery to bury a dead loved one and they have not yet performed the ntsanganiko ritual, which in this case requires a cleansing and purification ceremony that involves sexual intercourse. It is held that if a person touches a baby in these both polluted states, the child will become ill. If this sickness, also termed madzawode or phir-ingamasis, is not treated in time the child can die. Hence, children who have not undergone all the steps of madzawode are highly susceptible to disease. On the other hand, as madzawode ends, so the infant is protected from ill health and a new phase in its life begins.

In the past, there was no need to be preoccupied with other people’s sexual misconduct or ntsanganiko requirements because, in principle, everyone knew and respected the strict rules attached to madzawode. Parents could wait two years before completing madzawode without
fearing that someone with “hot blood” in the community would touch their baby in the inter-
vening period. However, since the years of war and drought there has been a growth in the local population and a marked increase in social differentiation, resulting in overcrowding in some areas. Such trends are perceived by many as a grave threat to infants. The concern is that with the overcrowding and the lack of community involvement in child rearing there is a serious risk that adults who have just had sexual intercourse may touch babies who have yet to undergo madzawinde, thereby threatening their health and survival. In this way as soon as the baby is born parents get very anxious fearing that with madzawinde the child is at high risk of being contaminated by anyone in the community including family members. Hence, they rush to perform the madzawinde ritual reducing its historical time frame from two years to three to six months. According to the culture it is not recommend that a mother practices the coitus while still breastfeeding the baby because if she gets pregnant, as often happens, the law of ku wa muira is merciless vis-à-vis the baby and breast milk. No one in the community, fragmented as it may be, tolerates seeing a pregnant woman breastfeeding her baby. As stated above, although people in Gorongosa no longer share the same values and norms, and some people have even tried to remove traditions by joining the Christian churches, when it comes to ku wa muira, everyone is united even though this prevailing identity has serious consequences for infants when parents have this disorganized pattern of attachment.

In the past, besides the cultural reverence, the prolonged sexual abstinence used to be integrally fulfilled because of the men’s labor migration to the cities (Chimoio or Beira) or to the neighboring Zimbabwe where they used to spend a lot of time far from their wives. Today, with the present crisis in the labor market, men have nothing to do besides their work in the fields, and they feel the pressure to resume sexual relations soon after their baby’s delivery. This view was strongly emphasized by several people, particularly the men, both individually and in focus-group discussions.

If the person does not travel to work, sexual intercourse is like the replacement of work because we are together all the time, during the day and in the night. In this way, the man is working with his wife. If the man has a job he stays one, two years outside the village and he goes to work. He just returns home to visit the wife, the child and to leave some money, then the person returns to work. . . He stays two years and the child grows up, because to stop breastfeeding there is a need of two years. After this period of abstinence it’s OK to make the madzawinde ceremony and resume sexual relations with the wife. But in my case, I am just sitting down at home, I just leave Mucodza to go to Vila Paiva, then I return home and there is no job, I just call her and I work with her. I am not working, I stay with my wife 24 hours a day and there is nothing to do, then I just call her to work with her . . . (Interview, 15.08.2000, Mucodza, Gorongosa.)

The etiology of PEM in Gorongosa is not related to lack of food but with the disorgani-
zation of madzawinde caused by war and related socioeconomic effects such unemployment among young men. Parents are affected and society has changed dramatically to the extent that people no longer shares the same viewpoints on how to make use of madzawinde in the care of their infants in the first two years of life. The result of this disorganized pattern in the trans-
mission of attachment is that children experience an early detachment from their mothers and consequent abrupt weaning which leads inevitably to PEM. This result is slightly consistent with the findings of Dixon et al. (1982). In their study, among the Gusii from Kenya, they found out that malnutrition symptoms were in part related to what they termed “disorder of attachment.” But unlike the population of Gorongosa, the disorder of attachment in the Gusii
context was not caused by exposure to war or political violence. Among the same population group, the Gusi from Kenya, Kermond, and Leiderman (1986) found that the nutritional status of the children was associated with the type of infant–mother relationship. True (1994, quoted in Van Ijzendoorn & Sagi, 1999) demonstrates from his study among the Dogon of Mali that attachment security can be a protective factor against malnutrition and by contrast its disorganization can lead to infant morbidity.

Comparing research and clinical findings from western and non-Western societies vis-à-vis unresolved experiences of mourning and trauma and eventual disorganized patterns of attachment yield interesting results. In Western societies some studies seem to confirm that unresolved experiences of trauma and loss might lead to disorganized infant attachment accompanied by emotional, cognitive, and behavioral dysfunction (Bakermans-Kranenburg, Schaengel, & Ijzendoorn, 1999; Fonagy, 1999; Hughes, Tuton, Hooper, McGueley, & Fonagy, 2001). The few available studies from non-Western societies, particularly from Africa, show that disrupted patterns of attachment might seriously compromise infant survival in the first place. In such difficult circumstances infants often do not reach the age of five. Ward and colleagues (1993; Ward, Brazelton, & Wuest, 1999) also found some association between malnutrition and stress in the family environment and in parent–child interaction. They found a correlation between the children diagnosed with Failure-to-Thrive (FTT) and the quality of relationships with the parents. Although not relating to PEM cases among children, George Devreux (1980[1956]) observed that emotionally ill parents traumatize their children even if they follow all cultural rules governing child-rearing techniques.

An intriguing example relating cultural representations of rearing practices with psychopathological features and its effects on infant mortality was studied by Zemplini and Rabain (1965) and Henri Collomb (1973) among the Wolof, Lebou, and Serer of Senegal. Among the three ethnic groups infant mortality was very high and society seemed indifferent to the death of their children which received the name of “nit ku bon child” (Zemplini & Rabain, 1973) or “the child who leaves and returns or the death of the same child” (Collomb, 1973). These ethnic groups believe in the reincarnation practice, which in part allowed them to have an extreme ambivalent and disorganized pattern of attachment with tremendous implications for the child survival. There are important differences between the nit ku bon child (person who is bad) and madzawde. The latter was created and developed to guarantee the child survival while the former appears that it was developed to help parents and society in general coping with the apparent impossibility to identify the identity of the child because of the sudden and repeated deaths of young babies. To the nit ku bon child were attributed characteristics that contradict the basic common sense regarding child psychology and development. In general the local people believe that “the nit ku bon child has consciousness and his mind is loaded with suicidal thoughts . . . He refuses to remain alive because of sin or an impurity was committed against the law of the ancestors . . . Ancestral spirits possessed him or himself is the reincarnated ancestor, etc., etc.” (Collomb, 1973; Zemplini & Rabain, 1965). The possibility of the nit ku bon child to become a spirit is another important difference that distinguishes from madzawde, which does not belong to a category of spirits, and it has nothing to do with ancestors. When healers diagnose madzawde or phiringanicó, the ancestors do not play any role. Rather, the parents and neighbors misconduct are the main responsible for the ill health of the infant diagnosed with madzawde or phiringanico. However, this does not mean that the infants cannot get sick and even die because of evil spirits or ancestors’ dissatisfaction vis-à-vis the realm of the living.

One of the immediate consequences of the disruption of madzawde is that both the natural feeding schedule and the child–mother symbiotic relationship is abruptly interrupted. The mother often loses patience with the constant crying of the child. The physical and psycholog-
tical burden caused by uninterrupted pregnancies (Balldin, Hart, Huenges, & Versluys, 1991; Naismith, 1981) leaves the mother in a permanent state of frustration and the child’s noise becomes another source of irritation to the mother. Communication between the child and the mother also becomes more difficult. This has multiple implications: the crying of the baby is no longer perceived by the mother as the expression of a vital need she can fulfill; rather, it becomes a source of annoyance not only for her but also for the rest of the family. The mother is unable to provide the necessary care and attention to the special needs of the child in this period, which deeply affects their relationship, bringing potentially harmful consequences for both of them. Yet more research is needed on the long-term effects of violence and posttraumatic reactions on childbearing (Seng, 2002).

This failure to respond to the vital needs of the child leads to the development of marasmus or kwashiorkor symptoms (Berg, 1987; Collomb & Valantin, 1974; King et al., 1988; Mayer, 1976; Reutlinger & Selowsky, 1976; Williams, 1935). When parents realize that their child is ill, the health-seeking behavior is primarily directed to traditional medicine and parents do what is locally designated “ku mu fambira ntsango.” This means to look for the origin of the disease at the traditional healer’s house. This health-seeking behavior implies consulting more that one traditional healer to make sure that the different diagnoses match with one another. In the time they take going from one healer to the other (ku mu fambira ntsango) the child gets worse and when they finally take him/her to hospital, the child has usually already lost a significant amount of weight. In some cases the child is not able to communicate with the external environment and can no longer smile or cry. Both the child and the mother are by then in need of rehabilitation. (Within the Health Center in Gorongosa there is a Center for Nutritional Rehabilitation. The rehabilitation, which is only provided for the children, consists of a mixture of milk, oil and sugar (LOA). They also monitor the child’s weight during the rehabilitation period, which can last three months. Head of the Nutritional Rehabilitation Center. Interview, 17.08.2000, Vila Paiva, Gorongosa.)

**PIM AND KU KANHICA OR PHIRINGANÇO**

The descriptions of the sick children whose parents do not follow madzawde practice (or follow it differently from the historically prescribed norm) given by the traditional healers are the same as those observed in the ward of the district hospital. In fact, within the taxonomy of the traditional healers in Gorongosa, if the parents do not follow the rules of madzawde, the child gets madzawde or phiringanço. But in this case, madzawde turns into a set of physical symptoms specifically called phiringanço or ku kanhica, i.e., the baby gets very thin and his/her bones become prominent.

Culturally defined ku kanhica can be understood as the physical condition of a child whose parents do not obey madzawde. It also means that the parents did not invite the cha mutsho to do ku pukuta so that they could freely have their first sexual relations after the birth of the child. Howard and Millard (1997) found a similar type of exegeses of the role of sexual intercourse in children’s illnesses among the Chagga. Children’s malnutrition was regarded as the result of parents’ sexual misconduct. The symptoms observed in the child by the traditional healers included diarrhea, vomiting, and a very thin body. Several female healers referring to the disruption of madzawde and its symptomatology asserted that:

When we see that the child is getting a white skin or a big belly, we know that this is phiringanço. We give some medicine to do ku bikirira (cook medicine). The problem of mad-
Madzawde comes because the parents changed the place where the child was born. The parents changed the clothes that the child was born with and there are many things that happened inside their yard. Because of ndondo ia nkondo (war suffering), today there are many people leaving our traditions behind and women give birth in hospital. Then the parents lose control of the baby’s demands and they do not know where the mistake is coming from. Then they begin to say “we will stop giving birth at the hospital.” They begin to say such things while they have a black skin. Our black skin is very complicated, when the child gets ill, the healers say that it’s phisinganicão because there is no other disease that causes problems in the belly of the child. Then, we take maize to do ku pukutissa so that the child can get better.” (Interviews with female traditional healers, Gorongosa, 2001.)

The only difference between the cases observed by the traditional healers with those observed by the health workers is the explanatory model of the etiology of these symptoms. The healers agree that the etiology of ku kanhica is traceable to the parents’ breaking of madzawde. The health workers attribute malnutrition to a set of interconnected factors that begin with (a) the reduced time frame from one pregnancy to another, resulting in early weaning; and (b) the lack of a proper diet to replace breast milk.

THE REMNANTS OF MADZAWDE

Today, there are still some remnants of these regulating mechanisms although in different forms, with less rigid rules and a less than complete compliance by the population. Traditional healers and other wise people and elders in the communities consider young people to be the most affected by the changes and losses that have occurred in their culture. Young people seldom follow the cultural prescriptions of their ancestors, which acted to safeguard the life of community members against the adversities that historically assaulted them. One traditional healer, referring to the posttraumatic effects of the war and drought on Gorongosa society, in particular concerning the life of young people, told me that:

After the birth of the child, the young men arrive home and they just want to have sexual relations with their wives and they say “these traditions of madzawde are things of the past, things of the older people.” The young people talk like that. But we believe that these attitudes of today are the problem. The ways of the elders work out very well when one obeys them. That’s why we say that madzawde and ntsanganiko still exist . . . As a result of the breaking of this tradition we are seeing many very thin babies, they are very thin, they just have bones and in some cases they end up dying. In these cases we say that these children are ku kanhica, which means that it’s a baby whose parents do not obey madzawde. (Traditional healer. Interviews, 13.08.97 and 16.10.99, Nharoi-Vundzu, Gorongosa.)

The extent to which madzawde has really changed is not yet well known in a community-based setting. However, the people in general and the traditional authorities and healers in particular recognize that the years of war and drought have brought many modifications to the cultural patterns of their lives. This research was only able to determine that there are people who no longer perform this homeostatic mechanism but for those who do still perform it there are differences from one family to another, from one individual to another or even within the community of traditional healers in the way they describe its structure and dynamic. More in-depth knowledge of the remaining practice of madzawde is important to establish an up-to-date foundation on which to design and develop projects using an approach that combines
traditional health care with modern medical care. Further systematic and longitudinal research is required for this task.

CULTURALLY SENSITIVE INTERVENTIONS

Given the similarities observed by both systems of physical and mental health promotion (traditional and conventional medicine), one would not expect there to be ideological barriers to their integration into culturally sensitive interventions if it would benefit the users. However, this has not been the case. The barriers that separate the two systems seem to be huge and until now there has been no fruitful dialogue between these two health institutions to create a better system of family planning that can guarantee a more balanced development for young children and their mothers.

The combination and integration of knowledge and efforts (Akerele, 1987; Gwatkin, Wilcox, & Wray, 1980; Mandlate, 1996; Schuften, 1981; Young, 1983) of these two institutions could positively contribute to promoting effective preventive measures on a large scale throughout the former war zones in this district. (The integration of modern and traditional medicine to address different health problems has been recognized as a primary need of the Mozambican National Health System. Mozambican government authorities have been defending integration policies of both systems and this intention is clearly stated, for example, in the National Mental Health Program. However, the lack of systematic knowledge that sustains the roots of the Mozambican cultural mosaic has been the stumbling block for putting into practice any integration policy, regardless of the political organization in power. Unless a long-term and nationwide project is launched to study and systematize the knowledge of the different cultural realities, any attempt to implement integration policies is condemned to fail, no matter how sophisticated it may be.) Instead, in the present dynamic and according to the two models, both systems are only dealing with the symptoms and not with the real causes of the problem. In the meantime, every year new cases of malnutrition or ku kahnica are reported. There is a need to give back the dignity of the child and the mother that was guaranteed by madzawde. Without combined approaches sensitive enough to address the real roots of this cultural disruption, children and their mothers will have their development placed at permanent risk.

LIMITATIONS OF THE STUDY

This study was exploratory and has several limitations. The aim was to produce data in a "pressure context" to identify the main trends associated with the prevalence of PEM cases among children. Because of the numerous cases of PEM and the lack of resources, the health center staff wanted to find a reasonable and local solution to reduce the problem. The data produced in this study are expected to create the basis for a community preventive program not solely confined to community nutritional training (which is already underway but has, as yet, had little positive impact). The context of poverty and emergency relief did not allow the study to use measuring instruments such as weight for height, height for age, and arm and head circumference. Control groups were not used to compare the mothers that still practice mudzawde with those that belong to families that have already stopped. This will be part of a forthcoming research study when some degree of stability and control of PEM prevalence has been reached. The priority in the short-term is confined to preventive action at a community level using local categorizations found in childcare such as mudzawde, phiringaniyo, ku kahnica, ku kosa muana and ku wa muira.
REFERENCES


