Genocide and the Plight of Children in Rwanda

Paul Geltman, MD, MPH; Eric Stover

THE RWANDAN genocide of 1994 will be remembered as one of the greatest human tragedies of our time. In less than 3 months, extremists systematically slaughtered more than 500 000 people, including thousands of children.[1] The massacres reignited a bloody civil war that forced more than 4 million people to flee their homes.[2] Today, nearly 3 years later, Rwanda remains a highly traumatized society, where children are its most vulnerable members. Among those most at risk are more than 100 000 children who were orphaned or separated from their parents (United Nations Children's Fund, unpublished data, press release 94/26, May 24, 1994).

Between August 1994 and February 1996, we traveled on 3 occasions to Rwanda and northeastern Zaire as representatives of Médecins du Monde and Physicians for Human Rights. Our task was to assess the nature and scope of the Rwandan genocide and its effects on children. We also wanted to examine how Rwanda's health and social care systems and international relief organizations have responded to the medical and social needs of children traumatized by the genocide and war. We interviewed children who were internally displaced or living in refugee camps in Zaire. We spoke with physicians and other health professionals from Rwanda and other countries who were providing medical and psychosocial services to children displaced by the genocide. We also interviewed officials of the new Rwandan government, the United Nations Assistance Mission to Rwanda, the United Nations High Commissioner for Refugees, the United Nations Children's Fund (UNICEF), the United Nations International Tribunal for Rwanda, and representatives of several nongovernmental relief and human rights organizations.

Genocide is the most heinous of all state-sponsored crimes. Article II of the "Convention on the Prevention of the Crime of Genocide," adopted by the United Nations on December 9, 1948, and acceded to by the Rwandan government in 1975, defines "genocide" as "acts committed with intent to destroy, in whole or in part, a national, ethnic, racial or religious group."[3] The acts that constitute genocide include killings, causing serious bodily or mental harm, deliberately inflicting on the group conditions of life calculated to bring about its physical destruction in whole or in part, imposing measures intended to prevent births within the group, and forcibly transfering children of the group to another group.

History teaches that acts of mass violence, such as war and genocide, not only maim and kill but also undermine the emotional stability of survivors and their families and communities.[4,5] Our findings suggest that many Rwandan children have suffered inordinate and, in some cases, irreparable physical and psychological damage. Children are resilient, and many hopefully will be able to cope with the trauma of genocide and lead normal lives. But if these children cannot reach some form of reconciliation with the violence they have experienced, many may turn to maladaptive and violent behavior. How Rwanda's children respond to the trauma of genocide will depend largely on the social and cultural recovery of the wider community.[6] International support of programs that promote the rule of law, community cohesiveness, and social support networks for children will help break Rwanda's cycle of communal violence and retribution, but they must be implemented soon, before this future generation turns its anger and hatred outward.

BACKGROUND

Rwanda, with a population of 7.5 million,[7] is a small, densely populated East African country with 3 population groups, the Hutu, Tutsi, and Twa (Figure). Comprising more than 90% of Rwanda's population, the Hutu and Tutsi are amorphous categories once based on lineage and occupation: Hutu were cultivators and Tutsi were pastoralists. They intermarry, share a common culture, and speak a single language, called Kinyarwanda. The Belgians, who ruled Rwanda from 1916 through 1962, politicized these categories by favoring Tutsi over Hutu through rule by a single Tutsi king. The colonists also consolidated a small Tutsi aristocracy that was appointed to posts in the colonial administration and had access to the limited number of salaried jobs in the private sector.[8]

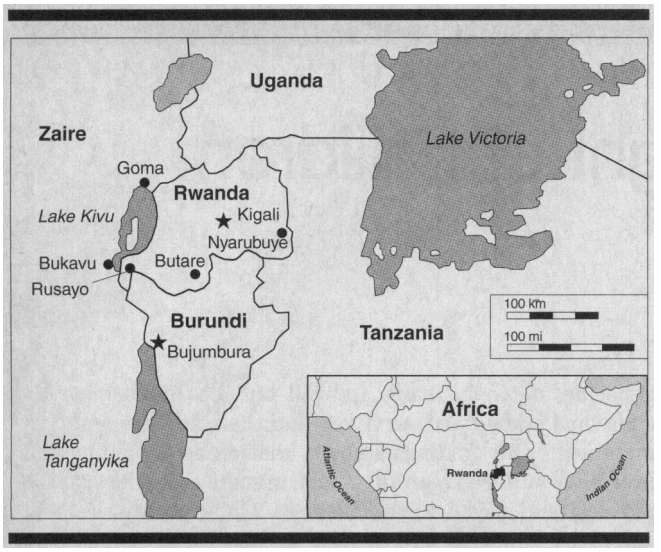
Following independence in 1962, the Hutu majority took control of the government and armed forces. Violence between the Hutu and Tutsi followed in December 1963 and resulted in the deaths of more than 20 000 Tutsi and the exodus of 100 000 more to neighboring countries.[1] The current crisis was triggered in 1990, when the Rwandan Patriotic Front (RPF), an army led by Tutsi exiles, attacked from Uganda, seizing a foothold in the northeast and demanding an end to extremist Hutu rule. As Hutu youth militias—the *Interahamwe* (those who attack together)—were recruited and armed for "civil defense," massacres of Tutsis and assassinations of moderate Hutus occurred with increasing regularity.

On April 6, 1994, Rwanda's president, Juvenal Habyarimana, a Hutu who had sought peace with the RPF, died in a plane crash near the capital of Kigali. Within hours of the crash, Hutu soldiers and militiamen began hunting down and killing Tutsis and moderate Hutus. During the next 2 months, as the RPF

Edited by Annette Flanagin, RN, MA, Associate Senior Editor.

From the Department of Pediatrics, Boston University School of Medicine and Boston Medical Center, Boston, Mass (Dr Geltman); and Human Rights Center and School of Public Health, University of California, Berkeley (Mr Stover).

Reprints: Paul Geltman, MD, MPH, Physicians for Human Rights, 100 Boylston St, Suite 702, Boston, MA 02116 (e-mail: phr@igc.apc.org).



Rwanda and its neighboring African countries.

advanced on Kigali, Hutu soldiers and militiamen used machetes and masus, or clubs, to massacre hundreds of thousands of people who had sought refuge in churches and schools throughout the country.[1] In late July 1994, the RPF had gained control of the country and set up government in Kigali. In the meantime, more than 1 million Rwandans had fled to refugee camps in Zaire, Burundi, and Tanzania and other parts of Rwanda. More than half of the refugees were than 15 years and 20% of those were than 5 years (United Nations Children's Fund, unpublished data, press release 94/26, May 24, 1994).

Today, Rwanda continues to struggle with the legacies of war and genocide. Economic recovery has been slow. Many professionals were killed or fled during the genocide, leaving the country's universities, hospitals, and schools understaffed. Most of Rwanda's hospitals and rural health clinics lack basic medicines and supplies.[9] Hutu refugees, numbering in the hundreds of thousands, had refused to return home because they feared either retribution from their Tutsi neighbors or from the Hutu military and militia leaders who controlled the camps.[10] However, in late 1996, fighting along the Zairean border between Zairean Tutsi and the vestiges of the former Hutu army and militias forced the repatriation of hundreds of thousands of refugees back into Rwanda.

Accountability for past atrocities, largely recognized as a prerequisite for reconciliation, remains elusive. The International Criminal Tribunal for Rwanda, established in November 1994, lacks sufficient funds to investigate and prosecute the leaders of the genocide. Rwanda's justice system is also strapped for money and personnel. There are only 3 prosecutors and fewer than 10 judges for the entire country. As of March 1996, more than 85 000 prisoners, including 318 children younger than 6 years and almost 1000 minors in all, languished in horribly overcrowded jails where deaths from bacillary dysentery and dehydration have reached as high as 4 to 5 a day (unpublished data, Save the Children Fund-USA, March 1996).[11]

THE PLIGHT OF CHILDREN

Children were particularly vulnerable during the 1994 Rwandan genocide. Hutu soldiers and allied militias specifically targeted children for slaughter either in groups or with their families. Children were forced by militias to kill other children. Tutsi children (especially males) were maimed, and girls and young women were raped.[1,9] A survey of Rwandan rape victims found that in 18.4% of rapes, the victim was 17 years or younger, and nearly 67% were between 14 and 25 years old.[12] One of the worst attacks against children took place on May 1, 1994, when Hutu soldiers and militiamen killed 21 children who had been evacuated to a Red Cross orphanage in Butare (International Committee of the Red Cross, unpublished data, press release 94/20, May 3, 1994).

Many children witnessed the deaths of their parents, siblings, or neighbors. More than 90% had experienced a death in the immediate family.[13] For example, relief workers found a 10-year-old boy who had lost his parents sitting next to the bodies of 3 other children. He barely spoke and had contractures of the extremities that prevented their use.[14] We interviewed an 8-year-old boy in southeastern Rwanda who was 1 of 4 survivors of a massacre that claimed the lives of an estimated 4000 to 5000 people in the parish of Nyarubuye on April 9, 1994. At the time of the interview, machetes, clubs, spent cartridge shells, and hundreds of decomposing bodies, including those of his family, still lay scattered about the parish grounds and the adjoining primary school. When the militia forced their way into the church compound, the boy and his family were hiding in a garden shed. He remembers hearing screams and then being pulled from the building. Militiamen pushed him and his family up against the shed and began hacking them to death with machetes. He survived by hiding under the bodies of his parents and acting as if he were dead. Later the next morning, he found 3 other survivors hiding in the tall grass surrounding the parish. He now lives with his only surviving relative, an 83-year-old grandmother whose house is within a few hundred yards of the parish.

Children who survived the civil war and ensuing genocide suffered terribly in the refugee and displaced persons camps. Nearly 50 000 people, many of whom were children, died in the first month of the refugee exodus to Zaire.[15] In July 1994, cases of cholera in the camps in Zaire soared to nearly 1000 per day.[15] A nutrition and diarrhea survey conducted at the Katale camp near Goma showed overall crude mortality rates of 41.3 per 10 000 daily.[16] Some 90% of these deaths were associated with diarrheal disease. The mortality rate for children younger than 5 years was 40.4 per 10 000, nearly 10 times the estimated 1990 mortality rate in Rwanda for children younger than 5 years.[17] By the end of July 1994, the overall case-fatality ratio for diarrheal diseases in Katale camp reached as high as 22%. In addition, 23% of children surveyed in Katale either had global acute malnutrition with weight-for-height ratios with a z score of less than –2, or they had edema on examination.[16] In another group study, 36% of children who had had dysentery within 3 days before the survey suffered from acute malnutrition at the time of the survey.[16]

Children in the camps suffered from other diseases, including malaria, pneumonia and other respiratory illnesses, meningitis, and skin disorders. By far the most serious public health threats came from diarrhea and associated dehydration and malnutrition. The magnitude of the health crisis left nongovernmental relief organizations scrambling to put together relief efforts that were largely ineffectual in stemming the epidemics. These initial efforts were plagued by lack of personnel and supplies, poor sanitation and hygiene proce-

dures in the camps, identification of cases outside of treatment centers, poor utilization of oral rehydration solutions, inadequate chlorinated water, and the difficulty of digging latrines in the volcanic rock terrain surrounding the camps.[18] Once these problems were solved, disease and death rates plummeted. Refugee mortality and morbidity, especially among children, could have been avoided if relief efforts had been more rapid, better coordinated, and guided by lessons from the many recent refugee crises. In addition, despite years of warning signs and internal migrations of displaced Rwandans, the lack of preparedness by large international agencies, such as the United Nations High Commissioner for Refugees, greatly hampered relief efforts.[19]

PSYCHOLOGICAL ASPECTS

In late 1994, 3 months after the Rwandan genocide, a small-scale psychiatric morbidity survey of adolescents and adults in central Rwanda using the World Health Organization's Self Report Questionnaire found that 90% of those surveyed showed symptoms of psychological trauma.[20] Based on these data, anecdotal field reports, and UNICEF reports that support the 90% prevalence rate,[13] it is likely that large segments of the surviving Rwandan population (both adults and children) have been traumatized psychologically. Some attempts have been made to identify children with mental health problems in Rwanda. However, these efforts have been hampered by the lack of trained mental health professionals to work with these children.[21,22]

Studies in numerous countries have shown that the most common behavior and psychological symptoms in traumatized children are nightmares and sleep disturbances, persistent thoughts of the trauma, a belief that the trauma will be repeated, conduct disorders, reenactment in play, hyperalertness, avoidance of symbolic events or objects, psychophysiologic disturbances, and regression in younger children.[23-26] Children are particularly vulnerable to the disappearance or violent death of a parent. Common symptoms observed in such children are withdrawal, depression, intense generalized fear, regression in behavior, and behavioral disorders, including loss of orientation and the evasion of reality. The severity of symptoms varies according to the child's age, the duration of the trauma, the extent of social isolation, and the degree to which they find the explanation for the parents' absence convincing.[27]

For refugees, traumatization is not necessarily related to an isolated incident or set of events. More often, it is an enduring, cumulative process that continues as the refugee confronts distinct new events, both in the country of origin and in exile.[28] For example, studies of the mental health status of Cambodian children who were war refugees in Thailand during the 1980s and later emigrated to Oregon show that they suffered from high rates of depression and behavioral problems.[29,30] A 1988 study[29] of Cambodian children in Thai refugee camps found that recent threatening events were more closely related to a child's current fears and worries than were previous separation and death of family members. The Oregon follow-up study[30] of 40 Cambodian adolescents who had been traumatized 8 to 10 years before found that the children had a prevalence of posttraumatic stress disorder at 48% and of depression at 41%. However, the presence of a surviving family member helped mitigate the symptoms.

Cultivating familial and adult relationships is an important step in healing the psychological wounds of children exposed to trauma.[31] Even this, however, will not necessarily compensate for the loss of 1 or both parents.[32] The reestablishment of safe social relationships and community and family functioning also serves to encourage children's self-esteem and to allow them to tell their stories of trauma.[33-35] The ability of children to communicate their emotions is central to any reconciliation and recovery from psychological trauma. Community-based activities that promote such reconciliation processes must be identified, supported, and extended throughout Rwanda and the region.[24]

Children, like adults, who have directly experienced or witnessed brutality need to understand that society not only condemns such behavior but actively seeks to punish those responsible. In his work with Nazi concentration camp survivors, Lifton[36] called this process the survivor's "struggle for meaning." He found that concentration camp survivors often "seek something beyond economic or social restitution—something closer to acknowledgment for crimes committed against them and punishment of those responsible—in order to reestablish at least the semblance of a moral universe."[36] In Central and South America, physicians and mental health professionals have noted a similar need among children and adolescents whose parents were tortured and killed by state-sponsored death squads in the 1970s and 1980s.[26,34,37,38]

REUNIFICATION OF FAMILIES

One of Rwanda's most pressing problems has been locating and reuniting the estimated 90 000 to 115 000 orphans or unaccompanied minors from the 1994 genocide and exodus with their parents or extended families.[39] The stories of separation are often the same. Children and parents were not in the same place when the killing started and fled in different directions or became separated in the exodus of hundreds of thousands of refugees. In some cases, Hutus protected Tutsi children and fled with them to refugee camps in Zaire or Burundi.

A coalition of international relief organizations, led by the International Committee of the Red Cross, have established the largest tracing program since World War II in an attempt to reunite Rwanda's unaccompanied children with their parents.[10] Because Rwandan children are often given last names that are different from their parents, the network has compiled a dictionary of proper names with 21 000 standardized entries to assist relief workers as they review the data bank, which includes such information as parents' names, home districts, and the date that children last saw their parents. Photographs of unaccompanied minors have been displayed in refugee and displaced persons camps. The search has also been assisted by radio programs that broadcast the names of children and parents and the locations of field stations where people can get more information for the data bank or look for missing family members.

One year after the genocide, the network had registered the names of 94 000 children and nearly 25 000 parents. Of these children, 43% were in camps in Zaire, and 28% were in Rwanda. Of the 47 646 children whose ages were known, nearly 20% were younger than 6 years. As of September 30, 1996, some 94 000 children had been registered and 10 564 of these children had been reunited with their immediate families.[40,41] With the massive return of refugees in late 1996, there are new concerns that the numbers of unaccompanied

children may dramatically increase again. Just from November 14, 1996, through December 2, 4679 unaccompanied children were registered, along with 1776 reunifications.

PROGRAMS DIRECTED AT CHILDREN

Soon after the 1994 refugee crisis, relief organizations established dozens of "children's centers" in refugee and displaced persons camps to care for children. Many centers were created at preexisting orphanages. Most of the centers relied on refugee women—many of whom had lost their own children or were widows—who acted as surrogate mothers for the children.[39] Each "mother" was typically responsible for 6 to 11 children and attempted to fill the void of the loss of social and familial supports for the children. Initially, these centers had virtually no resources for play activities, teaching, or social functions. Surrogate mothers had little or no training in providing group foster care or teaching young children. Despite these problems, the centers helped curb the initial high rates of morbidity and mortality among orphaned refugee children.[18]

By September 1996, 5524 children were being cared for in 52 group care facilities in Rwanda.[40] Most of these facilities ranged in population from 60 to 1000 children. The ratios of care providers to children ranged from 5:1 to 10:1.[42] One orphanage (*Cité de les Misericords*) in the prefecture of Rusayo offers an interesting model on how to combine efforts to support both orphans and displaced families. In August 1994, as refugees flooded into the region, the orphanage transformed a large enclosed stable into a camp for displaced families. These new arrivals contributed to the orphanage operations by working in the fields, helping with upkeep, and caring for the orphans.

In September 1994, we conducted a nutritional survey of the orphaned and displaced children at the Rusayo orphanage. The 188 orphaned and displaced children (up to age 15 years) represented a comparatively stable population. The data from 88 who were age 6 or younger were analyzed with Epinut anthropometric software (Centers for Disease Control and Prevention, Atlanta, Ga, 1994). The findings of the anthropometric survey show that the children at Rusayo suffered from a high degree of chronic malnutrition (as indicated by stunting, or low height for age) while acute malnutrition (as indicated by wasting, or low weight for height and age) was clustered among females. At the time of the survey, the children's diet consisted essentially of white rice and red beans from relief supplies. These data from a well-supported orphanage underscore the difficulty in providing adequate nutrition to a large group of children, especially in a society with historically high rates of malnutrition.

Orphanages may have deleterious effects on children.[43] In Croatia, for example, a 1993 study[44] revealed that children of internally displaced and refugee families who were placed in collective shelters were at greater risk for mental health problems than children whose families were housed with host families. Compared with 24% of children in a shelter, 43% of children who were living with host families were free of stress-related physical and mental symptoms. The Croatian study, similar to the Cambodian and Oregon studies, suggests that children traumatized by war and violence need both family support and a safe and stable environment.[45,46] The need for familial support stresses the importance of keeping children in communities, preferably with family members, rather than in orphanages or children's centers.[25]

As early as 1909, medical researchers in the United States have recognized orphanages as inadequate for the growth and development of healthy children.[47,48] Early studies of the effects of orphanages focused on the effects of maternal deprivation on infants and young children.[49] Children younger than 4 years in orphanages were found to have developmental deficits and IQ scores lower than children raised at home.[50-52] Even part-time mothering, though better than no contact, failed to improve significantly the growth and development of young children.[53] In settings with caretaker ratios of 1:2 or 1:3[43] and with resources for play and stimulation, some normalization of development can occur. However, Scandinavian studies have shown subsequent declines for children institutionalized within the first year of life.[54]

Although group residential settings for adolescents are potentially beneficial, the evidence for a detrimental effect on infants and young children is clear.[43] In the United States, a contemporary example of this can be found in internationally adopted children. Some of these children have often spent significant time in orphanages abroad while infants, and they have been found to have developmental delays.[55]

Another serious complication of any kind of group care or institutional setting is the spread of infectious diseases, including viral illnesses, skin infections and infestations, bacterial epidemics, cultivation of resistant bacteria, and intestinal parasites. Vaccine-preventable diseases such as pertussis and measles can threaten infants exposed in group settings before they develop immunity. Moreover, in a country such as Rwanda, which has one of the highest prevalence rates of human immunodeficiency virus (HIV) infection in the world, the role of HIV in the spread of infectious diseases and increased morbidity should not be underestimated.[56]

Reports of resistant *Haemophilus influenzae* in a Thai orphanage[57] and of invasive pneumococcal[58] and streptococcal[59] diseases are examples of the potential for severe disease in young children in orphanages and other group care settings. In addition, immunization rates are now estimated at only 65%, down from 82% before the genocide, and may indicate significant susceptibility to vaccine-preventable diseases such as measles and pertussis.[60] Given the widespread and often indiscriminate use of antibiotics in Rwanda since the refugee crisis, concerns about biologic resistance to antibiotics as in the case of *Shigella dysenteriae* are well founded.[15] In addition to these bacterial infections, upper respiratory and gastrointestinal viruses (including hepatitis A) are easily transmitted among institutionalized children. Intestinal and skin parasites[61] as well as skin infections such as impetigo and tinea capitis can be endemic. Common parasitic infections are scabies, giardiasis, amebiasis, and cryptosporidiosis.[62]

Rwandan families have a tradition of caring for children other than their own. In 1992, it was estimated that 1 in every 2 households in Kigali was sheltering children from unrelated families.[63] Rwandan government and relief agencies have begun placing orphans in foster care arrangements with extended family members and neighbors in their community of origin. One year after the genocide, 66 610 unaccompanied children (approximately two thirds of the total) had been placed in foster families.[64] To support this effort, relief organizations have established programs that help foster families gain access to community resources, encourage community participation in child care, and train families and

adolescents in income-generating activities such as farming, traditional weaving, auto repair, and child care. Through these programs, foster families are given adequate resources to become self-sufficient, and they can potentially maximize the growth and development of children growing up under such devastating circumstances.

Children's centers and orphanages saved lives and protected children from further violence and trauma during and immediately after Rwanda's genocide. However, the long-term reliance on institutional care, especially in facilities that are large, impersonal, and psychologically sterile, could create a population of children raised in conditions detrimental to healthy growth and development. In Rwanda, low-quality children's centers and orphanages continue to be perpetuated in almost bureaucratic fashion. Many of these facilities are understaffed, overcrowded, and ill-equipped.[19] Moreover, international humanitarian organizations that sponsor such centers have failed to conduct critical assessments of their long-term effects on young children or to consider alternative approaches. In a setting of massive displacement, orphanages can fulfill the immediate need of providing a somewhat stable environment for a child pending family reunification or foster care placement, but they should not be viewed as a long-term solution.

When family reunification is not possible, foster care placement offers some clear advantages over orphanages, but these benefits may be lost if the foster care family lacks the economic resources to support another child or uses the child as labor. Some relief agencies have noted that the lack of family resources is the primary reason foster children are out of school or working on the street.[40] The Rwandan government developed guidelines for the identification and selection of foster families based on economic, geographic, moral, and familial criteria. However, these guidelines have not been well enforced and the monitoring of foster care families remains poor.[40]

The Rwandan government and international relief agencies should cultivate transitional programs that convert residential children's centers into community day care centers. Day care centers could provide early childhood education, child development interventions, community psychosocial and nutritional support, medical screening, and respite care for parents, especially single mothers who are a significant portion of Rwanda's population, estimated now to be approximately 70% female.[19(p24)] These centers could also sponsor workshops on trauma alleviation and provide culturally appropriate, psychological support services for children and their families and the community at large. Services should be provided without discrimination to all in the community.

CONCLUSIONS

Rwanda has come far since the genocide of 1994. However, the recent return of approximately 750,000 Rwandan refugees will greatly strain the resources of the health care infrastructure. More than ever, the country needs international assistance to rebuild its health care system and to train health care providers. Most of Rwanda's hospitals and health clinics were severely damaged during the war, and more than 80%[19(p23)] of the country's health professionals were either killed or fled abroad.[1,9] From our interviews with physicians and government officials, we estimated that there were fewer than 10 trained pediatricians in Rwanda during our visit in early 1996. National pediatric associations could send medical teams to Rwanda to assist their colleagues in teaching and clinical care. International medical associations should support Rwandan physicians who have been in the process of establishing a medical association. Such an association is urgently needed to rebuild public trust in physicians after the well-documented complicity of medical personnel and hospital officials in the genocide.[9]

Significant problems continue to jeopardize child health and the recovery of the country in general. First, among several issues, is the need to reaffirm the rule of law. Besides the obvious goal of establishing justice, trials of the perpetrators of the Rwandan genocide can contribute to the rehabilitation of survivors and of society itself. By exposing the truth about past abuses and condemning them publicly, prosecutions can help prevent the seemingly endless cycle of community violence and retribution that has plagued Rwanda in recent decades. By establishing individual guilt, trials will help dispel the notion of collective blame for genocide and demonstrate that these crimes cannot be committed with impunity. Trials will also help foster respect for democratic institutions by demonstrating that no individual—whether a foot soldier or high government official—is above the law.

International relief organizations must learn from the Rwandan experience so that they can better address the needs of children in future refugee crises. Although some relief organizations did eventually provide appropriate community-based health care in the refugee camps, other agencies set up field hospitals and provided inappropriate inpatient pediatric care while neglecting to implement basic public health programs. Initially, the overall lack of focus on the most critical public health problems resulted from the lack of central coordination and poor technical leadership. Public health interventions that will prevent high rates of morbidity and mortality among children include sufficient food rations and clean water; adequate shelter and sanitation facilities; measles immunization for all children; a diarrheal disease control program focusing on the treatment of dehydration with oral rehydration salts; appropriate curative care targeted particularly at malaria and acute respiratory infections; and training for community health workers. Given the increasing numbers of children in refugee populations, relief groups and international agencies should promote training specific to pediatric and family-oriented relief and medical care. In addition, further research on the effective prevention of certain diseases that commonly affect refugee children (cholera, measles, hepatitis, and malaria) would be beneficial.[65]

Equally critical is the need to understand the impact of genocide and massive displacement on Rwandan children from a perspective of child growth and development. Before declaring children's centers and orphanages or foster care placements as models for future crises, comparative studies must be conducted to assess the logistical functioning of these programs, the quality of care and services provided, and the developmental outcomes of these children as compared with children in regular family environments. These studies should be culturally appropriate and should try to determine the kinds of social services, including training in job skills, that will enable orphaned children to lead healthy and productive lives.[35,66,67]

This work was supported in part by a National Research Service Award, Division of Medicine, Bureau of Health Professionals, Health Resources and Services Administration, No. 5 T32 PE10014.02; the NOVIB Foundation; and the Sandler Family Supporting Foundation.

We would like to thank the staff of the Rwanda field office of Save the Children Fund-USA for their assistance in facilitating our third visit to Rwanda and updating data for this article.

References

1. Omaar R. *Rwanda: Death, Despair, and Defiance.* London, England: African Rights; 1994.
2. Bureau of Humanitarian Response, Office of US Foreign Disaster Assistance. *Consolidated Rwanda Report Update #14.* Arlington, Va: US Agency for International Development; 1994.
3. Reisman MW, Antoniou CT, eds. *The Laws of War: A Comprehensive Collection of Primary Documents on International Laws Governing Armed Conflict.* New York, NY: Vintage Books; 1994:84-86.
4. Lifton RJ. *The Nazi Doctors: Medical Killing and the Psychology of Genocide.* New York, NY: Basic Books Inc Publishers; 1988.
5. Allodi F, Randall GR, Lutz EL, Quiroga J, Zunzunegui MV. Physical and psychiatric effects of torture: two medical studies. In: Stover E, Nightingale EO, eds. *The Breaking of Bodies and Minds: Torture, Psychiatric Abuse, and the Health Professions.* New York, NY: WH Freeman & Co; 1985:58-78.
6. Summerfield D. Addressing human response to war and atrocity: major challenges in research and practices and the limitations of western psychiatric models. In: Leber RJ, Figley CR, Gersons BPR, eds. *Beyond Trauma: Cultural and Societal Dynamics.* New York, NY: Plenum Publishing Corp; 1995: 17-29.
7. Borton N. *Rwanda: Civil Strife/Displaced Persons Situation Report #4.* Arlington, Va: US Agency for International Development; 1995.
8. Schoepf BG. Genocide and gendered violence in Rwanda. *Med Anthropol Q.* 1997. In press.
9. Hall P, Carney A. *Rwanda 1994: A Report of the Genocide.* Dundee, Scotland: Physicians for Human Rights (UK); 1994.
10. Lorch D. Frantic, bittersweet reunion for Rwandan exile children. *New York Times.* September 18, 1995:A1.
11. Stover E. In the shadow of Nuremberg: pursuing war criminals in the former Yugoslavia and Rwanda. *Med Global Survival.* 1995;3:140-147.
12. UNICEF. *Children: The Future of Rwanda: A UNICEF/Rwandan Ministry of Labour and Social Affairs Joint Update on Children in Especially Difficult Circumstances.* Kigali, Rwanda: UNICEF; June 1995.
13. Gupta L. *Exposure to War Related Violence Among Rwandan Children and Adolescents: A Brief Report on the National Baseline Trauma Survey.* Kigali, Rwanda: UNICEF Trauma Recovery Program; 1996.
14. Murray-Lee M. *Rwanda's Lost Souls.* New York, NY: UNICEF; 1994.
15. Goma Epidemiology Group. Public health impact of Rwandan refugee crisis: what happened in Goma, Zaire, in July, 1994? *Lancet.* 1995;345:339-344.
16. Paquet C, van Soest M. Mortality and malnutrition among Rwandan refugees in Zaire. *Lancet.* 1994;344:823-824.
17. Center for International Health Information. *Rwanda Country Health Statistics Profile.* Arlington, Va: US Agency for International Development; 1995.
18. Dowell SF, Toko A, Sita C, et al. Health and nutrition in centers for unaccompanied refugee children: experience from the 1994 Rwandan refugee crisis. *JAMA.* 1995;273:1802-1806.
19. Dabelstein N, ed. *The International Response to Genocide: Lessons From the Rwanda Experience.* Copenhagen, Denmark: Danish Ministry of Foreign Affairs; 1996:7-13.
20. Carney A. Lack of care in Rwanda. *Br J Psychiatry.* October, 1994;165:556.
21. Callaghan MP, Immerman B. PHS mission to Goma, Zaire. *Public Health Rep.* 1995;110:95-99.
22. Bonneau J. *Rapport de Mission AFSEA-Goma (Zaire): Aupres des Enfants Rwandais Refugies non Accompagnes.* Paris, France: Association Departementale de Sauvegarde de l'Enfance et de l'Adolescence; 1995.
23. Calvin F. Children traumatized by catastrophic situations. In: Eth S, Pynoos RS, eds. *Post-traumatic Stress Disorder in Children.* Washington, DC: American Psychiatric Press; 1985:103-120.
24. Dawes A. The effects of political violence on children: a consideration of South African and related studies. *Int J Psychol.* 1990;25:13-31.
25. Kanji N. War and children in Mozambique: is international aid strengthening or eroding community-based policies? *Community Dev J.* 1990;25:102-112.
26. Melville M, Lykes MB. Guatemalan Indian children and the sociocultural effects of government-sponsored terrorism. *Soc Sci Med.* 1992;34:533-548.
27. Allodi F. The psychiatric effects in children and families of victims of political persecution and torture. *Danish Med J.* 1980;22:229-232.
28. Van der Veer G. Psychotherapeutic work with refugees. In: Leber RJ, Figley CR, Gersons BPR, eds. *Beyond Trauma: Cultural and Societal Dynamics.* New York, NY: Plenum Publishing Corp; 1995:151-170.
29. Mollica RF, Fish-Murray C, Donelan D, et al. *Repatriation and Disability: A Community Study of Health, Mental Health, and Social Functioning of the Khmer Residents of Site Two.* Vol 2. Boston, Mass: Harvard Program in Refugee Trauma, Harvard University School of Public Health; 1989.
30. Kinzie JD, Sack W, Angell R, Clarke G, Ben R. A three-year follow-up of Cambodian young people traumatized as children. *J Am Acad Child Adolesc Psychiatry.* 1989;28:501-504.
31. Augustyn M, Parker S, Groves BM, Zuckerman B. Silent victims: children who witness violence. *Contemp Pediatr.* 1995;12:35-57.
32. McKelvey RS, Webb JA. Long-term effects of maternal loss on Vietnamese Amerasians. *J Am Acad Child Adolesc Psychiatry.* 1993;32:1013-1018.
33. Suarez-Orozco MM. Speaking of the unspeakable: toward a psychosocial understanding of responses of terror. *Ethos.* 1990;18:353-383.
34. Suarez-Orozco MM. A grammar of terror: psychocultural responses to state terrorism in dirty war and post-dirty war Argentina. In: Nordstrom C, Martin J, eds. *The Paths to Domination, Resistance, and Terror.* Berkeley: University of California; 1992:219-259.
35. Bracken PJ, Giller JE, Summerfield D. Psychological responses to war and atrocity: the limitations of current concepts. *Soc Sci Med.* 1995;8:1073-1082.
36. Lifton RJ. The concept of the survivor. In: Dimsdale J, ed. *Survivors, Victims, and Perpetrators: Essays on the Nazi Holocaust.* Washington, DC: Hemisphere Publications; 1980:123.
37. Nosiglia JE. *Botin de Guerra.* Buenos Aires, Argentina: Abuelas de Plaza de Mayo; 1985.
38. Fariña JJ. El terrorismo del estado como fantasma. In: Martínez V, ed. *Terrorismo de Estado: Efectos Psicologicos en los Niños.* Buenos Aires, Argentina: Paidos; 1987:21-41.
39. Bureau of Humanitarian Response, Office of US Foreign Disaster Assistance. *Consolidated Rwanda Report Update #11.* Arlington, Va: US Agency for International Development; 1994.
40. UNICEF. *Children: The Future of Rwanda: A Ministry of Labour and Social Affairs Update With UNICEF Support on Children in Especially Difficult Circumstances.* Kigali, Rwanda: UNICEF; September 30, 1996.
41. Gordon-Bates K. *International Committee of the Red Cross News.* Geneva, Switzerland: International Committee of the Red Cross; 1995;14.
42. de Charry A. *Synthèse sur les Orphelinats, Avril 95.* Paris, France: Médecins du Monde; 1995.
43. Frank DA, Klass PE, Earls F, Eisenberg L. Infants and young children in orphanages: one view from pediatrics and child psychiatry. *Pediatrics.* 1996; 97:569-578.
44. Ajdukovic M, Ajdukovic D. Psychological well-being of refugee children. *Child Abuse Neglect.* 1993;17:843-854.
45. Eisenbruch M. The mental health of refugee children and their cultural development. *Int Migration Rev.* 1988;22:282-300.
46. Garbarino J. Developmental consequences of living in dangerous and unstable environments: the situation of refugee children. In: McCallin M, ed. *The Psychological Well-being of Refugee Children.* Geneva, Switzerland: International Catholic Child Bureau; 1992:1-23.
47. Proceedings of the Conference on the Care of Dependent Children (1909). In: *Proceedings of the National Conference on the Care of Children, 1895-1915.* New York, NY: Arno; 1971:6.
48. Chapin HD. Are institutions for infants necessary? *JAMA.* 1915;64:1-3.
49. Goldfarb W. Effects of psychological deprivation in infancy and subsequent stimulation. *Am J Psychiatry.* 1945;102:18-33.
50. Tizard B, Hodges J. The effect of early institutional rearing on the development of eight-year-old children. *J Child Psychol Psychiatry.* 1978;19:99-118.
51. Tizard B, Hodges J. IQ and behavioral adjustment of ex-institutionalized adolescents. *J Child Psychol Psychiatry.* 1989;30:53-75.
52. Klackenberg G. Studies in maternal deprivation in infants' homes. *Acta Paediatri.* 1956;45:1-12.
53. Saltz R. Effect of part-time 'mothering' on IQ and SQ of young institutionalized children. *Child Dev.* 1973;17:80-90.
54. Hansen AB. Short term differences of infant development in nursery homes and in private families. *Acta Paediatr Scand.* 1971;60:571-577.
55. Miller LC, Kiernan MT, Mathers MI, Klein-Gitelman M. Developmental and nutritional status of internationally adopted children. *Arch Pediatr Adolesc Med.* 1995;149:40-44.
56. Miller N. The influence of HIV/AIDS in the Rwanda tragedy. *AIDS Soc.* 1994;4:1-6.
57. Simasathien S, Duangmani C, Echeverria P. *Haemophilus influenzae* type B resistant to ampicillin and chloramphenicol in an orphanage in Thailand. *Lancet.* 1980;2:1214-1217.
58. Takala AK, Jero J, Kela E, et al. Risk factors for primary invasive pneumococcal disease among children in Finland. *JAMA.* 1995;273:859-864.
59. Brahmadathan KN, Koshi G. Epidemiology of streptococcal pyoderma in an orphanage community of a tropical country. *Am J Trop Med Hyg.* 1988; 91:306-314.
60. *US Agency for International Development Congressional Report FY 1997.* Arlington, Va: US Agency for International Development; 1996.
61. Makhlouf SA, Sarwat MA, Mahmoud DM, Mohamad AA. Parasitic infection among children living in two orphanages in Cairo. *J Egypt Soc Parasitol.* 1994;24:137-145.
62. Janoff EN, Mead PS, Mead JR, et al. Endemic *Cryptosporidium* and *Giardi lamblia* infections in a Thai orphanage. *Am J Trop Med Hyg.* 1990;43:248-256.
63. Reid E. The psychology of war and HIV epidemic. *AIDS Soc.* 1994;4:6.
64. UNICEF. *Children of Rwanda: An Update on Children in Especially Difficult Circumstances.* No. 4. Kigali, Rwanda: UNICEF; May 1995.
65. Toole MJ. The public health consequences of inaction: lessons learned in responding to sudden population displacements. In: Cahill KM. *A Framework for Survival: Health, Human Rights, and Humanitarian Assistance in Conflicts and Disasters.* New York, NY: Basic Books Inc Publishers; 1993:144-158.
66. Gruber AR. *Children in Foster Care.* New York, NY: Human Science Press; 1978.
67. Rein M, Nutt TE, Weiss H. Fostering family care: myth and reality. In: Schorr AL, ed. *Children and Decent People.* New York, NY: Basic Books Inc Publishers; 1974:24-52.