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Backpack doctors risk Burma's Wrath

By Janet Wells

MERGUI-TAVOY DISTRICT, Burma — Eh Dah Zu, a petite 24-year-old woman, peeled back layers of white plastic and cloth wrapped around a stalk of sugar cane — a prop simulating bone, muscle and skin — before cutting it with a cable saw to simulate an amputation.

The exercise, part of a trauma skills workshop in eastern Burma, was a rare opportunity — and a stark reminder.

There are no doctors, no hospitals in this war-ravaged sliver of mountainous jungle near Thailand, where ethnic minorities have resisted the Burmese army for 60 years. The country's military junta provides little health care, or access to international humanitarian groups to help an estimated half million displaced and demoralized villagers, suffering from rampant malaria, malnutrition, and trauma, including one of world's highest rates of landmine injuries.



In response, Burmese refugees in Thailand developed a unique backpack medical system, effectively sneaking health care into their own country: A network of tiny mobile clinics now dot eastern Burma, with health workers like Eh Dah Zu carrying supplies on their backs, walking for weeks through remote jungles, separated from their families, risking capture and injury — all to get medical training and reach patients.

Essential health services

“It’s extraordinary, and one of the only examples that exists in the world where refugees and displaced persons themselves are going back into their country to provide essential health services in a situation of clear state failure,” said Dr. Chris Beyrer, professor of epidemiology and director of the Center for Public Health and Human Rights at the Johns Hopkins Bloomberg School of Public Health.

The backpack health workers are at “considerable risk,” added Beyrer. “The Burmese junta does not accept medical neutrality.”

The junta, known as the State Peace and Development Council (SPDC), considers health work in eastern Burma aid to the opposition. Since 1998, seven medics and one midwife have been killed by soldiers or landmines, and dozens captured and beaten, according to human rights reports. Health workers’ families have been threatened, and medical equipment stolen. Last year alone five clinics had to be abandoned, along with critical malaria, trauma and TB supplies, because of attacks by the SPDC and its allies.

Aye Chan, a 28-year-old medic, has been chased and shot at. Because of his work, he said, four years ago SPDC soldiers detained his father, demanding seven buffalo and the equivalent of \$400 in exchange for his life. His father paid, then fled, and Aye Chan has not seen him since.

Like other health workers, Aye Chan depends on villagers and armed guards for information to escape capture — and on his ability to run. “If the SPDC is close, my heart beats fast, knees shake,” he said through an interpreter. “We are fleeing, so there’s no time to feel scared. What I am afraid of is losing my pack. Then I have no supplies, no way to treat patients.”

Once considered the rice basket of Asia, decades of military rule in Burma (also known as Myanmar) have taken a blunt toll. Resource-rich, the junta’s top generals have reaped profits from mining, natural gas and logging, while reducing the country to one of the world’s poorest: Burma ranked 135 out of 179 countries in the United Nations’ 2008 Human Development Index, and tied with Iraq as the second most corrupt country in the world, according to Transparency International’s 2008 rankings.

Exodus of Burmese

Politics and economics have pushed more than a million people to flee to neighboring countries over the past two decades, with another million undocumented migrants estimated in Thailand alone. The country’s democratically elected leader, Nobel Peace Prize laureate Aung San Suu Kyi, has remained under house arrest for most of the last 20 years. More than 2,500 political activists languish in prison.

Recent events provided harsh evidence of the government’s continued iron grip: violent suppression of monks and demonstrators during a series of anti-government protests in 2007; and blocking critically needed international aid in the aftermath of last year’s Cyclone Nargis, the worst natural disaster in Burma’s history, with an estimated 138,000 dead, and 2.4 million homeless.

Pro-democracy activists, along with the country’s numerous ethnic minority groups have long been at odds with the government, and none longer than the Karen. Shortly after Burma’s independence from Britain in 1948, the Karen National Liberation Army launched a fight for autonomy now entering its sixth decade — the oldest civil conflict in

the world. The government has pursued a brutal counterinsurgency campaign, with soldiers demolishing 3,342 villages in eastern Burma since 1996, routinely destroying food sources and conscripting civilians as slave labor, according to the Thailand Burma Border Consortium. As a result, the region has one of the world's highest rates of maternal and child mortality.

Training medics is key

In charge of a health team assigned to an area with about 2,000 villagers in southern Burma, medic Eh Dah Zu spends four months hiking through the jungle before returning to the Thai-Burma border to attend trainings, deliver patient data, and pick up supplies for the next field stint. She is paid \$20 a month, which covers little more than the rice, chili oil, and seasonings she carries along with her medical kit — a knife, malaria medicine, antibiotics, IV solution, gloves, sutures and anesthetic.

“The villagers are in a bad situation,” Eh Dah Zu said through an interpreter. “I feel good, that this is helping my people.”

Eh Dah Zu's goal to be a health worker has been one constant in a life of dislocation. Her mother died when she was a baby, she said through a translator, and she hasn't seen her father, who lives in an area controlled by the SPDC, since he sent her to live in a refugee camp in Thailand thirteen years ago. An older sister died, a brother disappeared.

She trained with senior medics in Burma and at the Mae Tao Clinic in Thailand for more than two years before receiving her medic certification. In the field — where even carrying pen and paper can arouse the suspicions of SPDC soldiers — she has had her share of close calls. Last year, when SPDC soldiers came into the hut where she was hiding with her supplies, she pretended she was the village elder's daughter. “I am very small,” she said, smiling.

Danger seems to be no deterrent in recruiting staff for the backpack program. The trauma workshop, held last month at Tee Moo Kee, an administrative village for Karen health, education and military departments, had 18 medics officially registered. Another 23 less experienced health workers crammed into the bamboo, open-air classroom.

Over four days, two volunteer trainers — Dr. Larry Stock, 47, clinical professor at UCLA medical school, vice-chairman of the Emergency Department at Antelope Valley Hospital (Los Angeles County), and a member



of the Berkeley-based Planet Care/Global Health Access Program; and Frank Tyler, 43, a paramedic and director of operations with Australian Aid International — ran through a gamut of trauma skills, from basic emergency first aid to surgical interventions.

The final day was a practicum on three euthanized hogs. Eh Dah Zu, Aye Chan and their colleagues didn't hesitate, their hands bloody after hours of suturing, inserting chest tubes, performing cricothyrotomies, and amputations. Less experienced health workers stood on tables and chairs under the steamy jungle sun, to get a better look.

Miller, a 36-year-old Karen farmer who lost his leg in a landmine accident in 2007, surveyed the scene. One of the many displaced ethnic minorities living illegally in Thailand, he had traveled for hours by car and on crutches to the training site in search of medical advice. He has no money to pay for care in Thailand to treat the repeated infections he has had from pressure sores on his leg stump.



One crutch under his arm, Miller looked at the eviscerated, legless pigs (which would feed the village that night). Did it bother him, witnessing grisly amputations? No, he said.

“Because of this training, they can save limb and life,” he said through an interpreter. “If medic and supplies had been in place when I stepped on landmine, maybe my leg would not have problems.”

Eh Dah Zu also knew firsthand the value of continuing education — of practicing how to stop bleeding, create an airway, saw through bone: Skills learned at a previous trauma workshop, she said, had helped her save the life of a villager, his left foot and ankle blown off by a landmine.

“If they pick up ten percent of the material, that’s fine,” said Stock, who trekked to the jungle training site in a region off-limits to foreigners. “Some will pick up 80 percent. And it will give every member of a team a deeper understanding of what they might face.

“There’s no backup out here, they can’t refer a patient,” Stock added. “These medics are it.”

Mobile Medicine _In 1998, with spiraling mortality and disease in eastern Burma, refugee leaders from the Karen Department of Health and Welfare and the Mae Tao

Clinic in Thailand created the Backpack Health Worker Team. The organization is the backbone of a mobile health system capable of operating in a region where government troops and ethnic minority rebels have waged war for decades.

China's "barefoot doctors" of the 1960s provided the inspiration — with a twist: While Mao Zedong's Cultural Revolution celebrated its rural health corps, Burma's military junta considers it aiding the enemy.

With technical support and funding from a dozen international relief groups, the backpack health program headquartered in a Thai border town has trained and equipped more than 1,700 medics, health workers, midwives and village health volunteers. These health workers provide free emergency, primary and preventive care to an estimated 270,000 impoverished villagers in eastern Burma.



Pilot backpack programs have reduced malaria by more than 85 percent, increased access to maternal and neonatal care, and provided survey data linking increased mortality and disease with human rights violations, according to public health journals and human rights reports. The backpack health model has been so successful that it recently expanded to address ethnic minority needs on Burma's China and India borders.

The health workers — most of them Karen, the largest of Burma's ethnic hill tribes — “have a can-do attitude,” said Dr. Larry Stock, of the Berkeley-based Planet Care/Global Health Access Program. “Faced with a health crisis and major trauma, instead of saying, ‘We have no doctors,’ they’ve stepped up and are saving lives.”

--Janet Wells

For more information:

Planet Care/Global Health Access Program: ghap.org

Mae Tao Clinic: maetaoclinic.org

Backpack Health Worker Team: geocities.com/maesothtml/bphwt