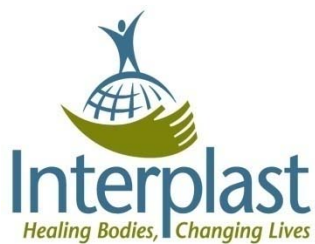


The Forgotten Global Health Crisis of Burns



Burns are a painful and often crippling disease afflicting 6.6 million people each year. Its victims are frequently disfigured, disabled, stigmatized and shunned. In some parts of the globe, burns affect more children than HIV/AIDS, malaria or tuberculosis.



Nearly 4 million women fall victim to a severe burn from fire each year—the same number who are diagnosed with HIV/AIDS every year.

- World Health Organization

Burns are more prevalent among women and are acutely tied to poverty. It is an international problem that can be largely prevented and/or treated.

Burns are the ignored, but solvable, global health crisis.

Scope: Nearly 4 million women fall victim to a severe burn from fire each year—the same number who are diagnosed with HIV/AIDS every year. (Burns are the only injury that happens more often to women than to men.) More school-aged children die of fires each year than of tuberculosis or malaria.

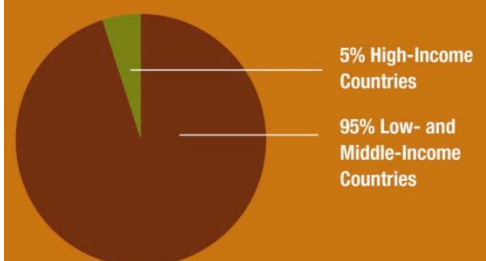
The burden of burn injury falls predominantly on the world's poor; 95 percent of fire-related burns occur in low- and middle-income countries where prevention programs are almost nonexistent and open fires for cooking, lighting or heating are commonplace.

The epicenter of burns is in Southeast Asia (which includes India), where three times

as many people suffer a severe burn as contract HIV/AIDS. Women in the region are 17 times more likely to die from fire burns than those in high-income countries; those who survive burns lose more productive years from fire burns than from malaria and HIV/AIDS. More school-aged girls in the same region die of fires than of tuberculosis, HIV/AIDS and malaria combined; and those who live with burns lose 1.5 times more productive years than those who contract malaria, HIV/AIDS and tuberculosis combined.

In India alone, burns are the third leading cause of burden of disease and the seventh leading cause of death for school-aged children.

Where Burns Happen





Economic Impact: Worldwide, severe burns cause disabilities that cost \$80.2 billion a year in lost productivity (wages and skills) alone; medical expenses would add millions more. Lost productivity costs the 16 developing countries in which Interplast works \$5.7 billion annually. That is more than the GDP of all of Nicaragua, and nearly the GDP of Mali.

Compounding these staggering figures is the fact that the burden of burn injury falls predominantly on the world's poor; 95 percent of fire-related burns occur in low- and middle-income countries.



Why Disabling Burns Happen: Severe burns happen frequently because a third of the world still uses open fires for cooking, heating and/or lighting. Overcrowded living conditions, lack of proper safety measures, loose clothing worn by women and insufficient parental supervision of children are other factors. Violence against women, the disfiguring of girls and women by throwing acid on them or setting them on fire is, tragically, another cause.

Burns cause children to stop going to school because they cannot use their hands to write. Mothers cannot pick up their babies because they can no longer bend their arms; and fathers lose their jobs because they can no longer walk, plunging a poor family deeper into poverty.

Millions of poor around the world have no access to basic medical care, let alone immediate access to adequate burn care. Consequently, their injuries are left to heal by themselves, creating a permanent tightening, or contracture, of the skin as the burn wound heals. This can severely limit mobility and function, as well as disfigure them in ways unimaginable in the United States, where such injuries are never allowed to progress to such a devastating degree. Without adequate acute burn care, for example, a burned foot may attach to the shin as the wound "heals" and the skin contracts, consequently eliminating the ability to walk.

Over the decades, Interplast has seen how ruinous and debilitating burns are for the victims and their families. They cause children to stop going to school because they cannot use their hands to write. Mothers cannot pick up their babies because they can no longer bend their arms; and fathers lose their jobs because they can no longer walk, plunging a poor family deeper into poverty.



Burn victims often become invisible social outcasts, a burden to their families, hidden from society with little chance of becoming productive citizens. Without proper medical care, burn survivors are forced to live with the economic, physical and psychological scars of disfigurement and permanent disability.

Interplast's Impact: For 39 years, Interplast has worked diligently to restore function and hope, reduce physical limitations and return people to work or school through reconstructive surgery. It has helped burn victims have a second chance at life.

Burns comprise half of Interplast surgeries, with 80 percent of them being performed at 12 year-round Interplast Surgical Outreach Centers in nine countries. Interplast also educates and empowers burn professionals in developing countries by providing training and workshops and sending teams of medical volunteers to help them with the backlog of burn cases.

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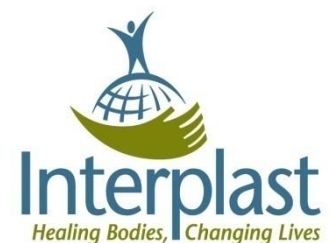
Notes: All statistics in this paper, unless otherwise noted, are from "Revised Global Burden of Disease 2002," World Health Organization, Geneva, Switzerland, 2002; or "A WHO Plan for Burn Prevention and Care," World Health Organization, Geneva, Switzerland, March 2008.

Limited Data: The ability to show the complete scope and impact of severe burns remains limited; these statistics do not account for burns caused by means other than fire. The only burn statistic currently gathered by the WHO is on burns caused by fires; yet, disabling burns also frequently occur because of electrocutions, hot cooking liquids and acids in cases of domestic violence—and those disproportionately impact women and those living in poverty, especially in developing countries. Therefore, the prevalence of burns and its impact on women and the poor is higher than the WHO data present. In developing countries, it is speculated that fire burns represent only around 50-60 percent of all burns. While one cannot assume that ratio for burns worldwide, it is reasonable to conclude that the problem of burns may be significantly higher than presented here.

Economic Impact: WHO measures the impact of physical limitations in terms of disability-adjusted life years (DALYs); these are calculations of the normal, economically productive years lost due to the burden of having a certain disease or disability, like a disabling burn. Interplast took the DALYs figures and multiplied them by the average annual individual income by country to illustrate the economic impact of burn injuries. To calculate income per year, Interplast used each country's GNI/capita (gross national income divided by the country's population) to give a rough estimate of the average income per citizen. Also, only three percent of disabled children attend school in developing countries, UNICEF.

Other Causes: Disease also plays a role. In Africa, where AIDS is the leading cause of death among those aged 15-60, the home fires are often tended by children forced prematurely into adult roles because their parents are sick or have died. Uncontrolled epilepsy is another contributing factor: women cooking for their families are burned while in the throes of a seizure. And highly flammable mosquito nets, designed to save lives from malaria—another leading killer of children—are also responsible for disabling burns in developing countries.

Interplast has transformed lives for 40 years. The first organization of its kind, Interplast provides free reconstructive plastic surgery for the poor in 16 developing countries. Interplast treats children and adults with clefts, disabling burns and hand injuries. Unlike many other organizations, Interplast's focus is to train and to empower developing world doctors to perform surgeries on their own for generations to come. Interplast is committed to transforming as many lives as possible, allocating nearly 90 percent of its budget to medical programs.



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