VIEWPOINT

INNOVATIONS IN HEALTH CARE DELIVERY

Social Entrepreneurship Improving Global Health

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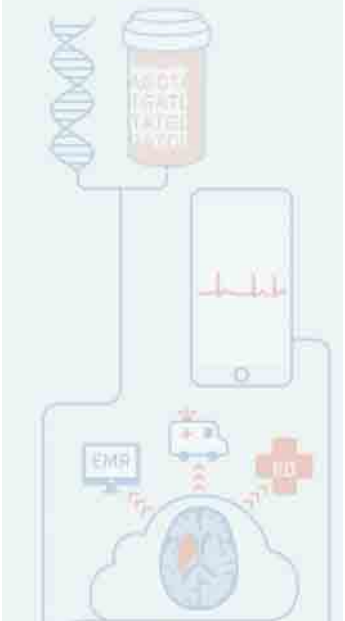

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At the expiration of the Millennium Development Goals in 2015, the United Nations noted that "millions of poor people still live in poverty and hunger without access to basic services" such as health care, clean water, and sanitation.[1] The new Sustainable Development Goals adopted by the United Nations for 2016-2030 aim to eradicate poverty; improve health and well-being; and provide access to clean water, sanitation, and affordable and clean energy.[2]

Among those working to improve global health are governments, nongovernmental organizations (NGOs), and social entrepreneurs. The defining characteristic of social entrepreneurs is their application of business and entrepreneurial approaches to solving social problems among disadvantaged populations. Unlike NGOs, social entrepreneurs do not rely on traditional charity as their main source of funding. They aim to become self-sufficient by developing viable business models and taking financial risks. A key assumption of social entrepreneurs is that individuals who are poor are not helpless or dependent, but rather are partners and co-designers of solutions. Social entrepreneurs focus not on donating to the poor but on providing affordable solutions. There is a mutual relationship rather than 1-way dependence.

Reaching the Underserved: Social Entrepreneurs

In the last few decades, social entrepreneurs like Aravind Eye Care System, which provides free or low-cost cataract surgery, have developed inexpensive yet effective solutions to deliver health care and social services to the poor and underserved. At Aravind, each surgeon performs more than 2000 surgeries a year and has outcomes and complication rates comparable with those in developed countries. Each surgery (including lens) costs as little as $50.[3,4] Patients who cannot afford the surgery pay nothing; revenue from paying patients helps pay for others who cannot.

Social entrepreneurs have emerged where governments and markets have failed to meet basic health needs, whether for specialty care, primary care, or clean water and sanitation. To fulfill those needs, they have given priority to health and social outcomes, combined ideas and methods from various disciplines such as health and business, developed models of health delivery that can eventually become self-funding, nurtured revenue streams from multiple partners across sectors, and produced frugal solutions in partnership with the communities they serve.

Since 2009, eHealthPoint India has delivered an annual average of 15 000 primary care consultations and 8000 diagnostic investigations in remote communities in Punjab, Andhra Pradesh, Maharashtra, Karnataka, the northeast region, and other parts of India. The basis for delivering primary care to the large number of villagers is the utilization of eHealthPoint's 310 conveniently located water points where 600 000 villagers daily collect filtered water for a subscription of $2 a month.[5] At some of these locations, eHealthPoint built primary care facilities where villagers can see a community health worker; consult physicians via telemedicine for $0.80; have diagnostic tests done for a dollar; and buy affordable, genuine generic drugs from a pharmacy. Away from these water and primary health care points, villagers with chronic diseases have their health status checked by teams of mobile community health workers using electronic slates.

Even more recently in Indonesia and 20 other countries, Kopernik has enabled 233 634 villagers in rural communities without access to the electrical grid or water systems to light their homes with low-cost solar lanterns, cook with clean-burning stoves, and drink filtered water.[6] Unlike those in other rural communities, villagers in these communities have avoided health risks from kerosene fumes, burns, and diarrhea and are safer because their homes and surroundings are lit. Kopernik developed a distribution network and financing mechanism that has made technologies affordable and available to rural dwellers.

Social entrepreneurs address multiple aspects of health delivery—from individual health care needs to population health, from health care professional capacity building to environmental health threats. For example, eHealthPoint provides low-cost clean water (addressing a public health threat) and simultaneously takes advantage of the water point to provide basic primary care to villagers. Aravind Eye Care System works to prevent and cure blindness while also training health professionals and producing low-cost ophthalmic lenses. Whereas innovations in businesses are usually patented, social entrepreneurs' innovative ideas are more freely shared. Aravind's model of low-cost eye surgery has been replicated in Indonesia by the John Fawcett Foundation and in Nepal by the Tilganga Institute of Ophthalmology.

How Does Social Entrepreneurship Work?

Streams of Financial and Nonfinancial Resources

Because they often operate in resource-poor environments, social entrepreneurs are motivated to seek multiple sources of financing and support to develop innovative and frugal delivery of health products and services. Social entrepreneurs typically access diverse financial resources: grants, loans, seed funding, competitions, ven-

ture philanthropy, crowd funding, giving circles, and corporate social investing. Social entrepreneurs also leverage nonfinancial resources—time, expertise and social capital—from a wide range of organizations and people. For example, Kopernik receives financial and in-kind support from corporate partnerships with companies such as Japan Airlines and Cisco Systems, grants and donations from governments and foundations such as the Rockefeller Foundation, and pro bono technical services from companies like Deloitte.

Toward Self-Sustaining Health Delivery With Earned Revenue

Although social entrepreneurs welcome grants and donations, they strive to earn revenue so that their program of work can become self-reliant. eHealthPoint collects revenue from water subscriptions and from fees for on-point diagnostics and telemedicine consultations. The earned revenue is then used to cover costs of service delivery and scale up operations. Kopernik generates revenue from consulting services on last-mile service delivery for hard-to-reach populations. Kopernik's combined financial support is eventually invested in creating access to low-cost technology, which is then sold to the communities it serves.

Interdisciplinary, Frugal Innovation

Another distinguishing characteristic of social entrepreneurs is their willingness to work across expertise and organizational boundaries with a clear focus on innovation, especially frugal technological solutions. Kopernik attempts to address health, social, and environmental problems by working with businesses to develop or distribute low-cost products and technologies such as solar lanterns, eyeglasses, water filters, and clean birth kits. The products are distributed in partnership with local NGOs and small businesses that traditionally sell basic necessities. Kopernik was an early adopter of what is now called "the platform economy," creating an online marketplace that connects different stakeholders. In the marketplace, Kopernik offers a curated selection of low-cost technologies, NGOs share their needs, individual funders can find out what and where the needs are and make pledges for support, and Kopernik seeks supporters for its latest initiatives (eg, on disaster relief) and shares results from its programs.

Strengthening Local Communities

The effect of social entrepreneurs often stretches beyond health delivery to capacity building and provision of economic opportunities. Local small businesses that distribute products for Kopernik have been upgraded to become "tech kiosks" that deliver and provide after-sale services for the products. Kopernik has also trained "Wonder Women," a corps of local women to distribute products to households. To prepare for their role, the Wonder Women improved their financial literacy, learned how to run a small business, and gained product knowledge. They have also attained a higher social status while earning income for their families. Aravind recruits, trains, and employs young women from the local villages it serves to work as health attendants in cataract surgery facilities and as health educators in the community.

A Trend That Cannot Be Ignored

Even though there are no comprehensive data documenting the number of social entrepreneurs working in health, social entrepreneurship-related courses offered in universities have increased during the past decade. At least 27 universities offer courses or programs, including Stanford, Yale, Duke, Pennsylvania, Oxford, and Copenhagen. The popularity of social entrepreneurship is also reflected in the growing number of annual social venture competitions. Twenty-five major competitions are organized annually by universities such as Harvard, Columbia, Northwestern, University of California, Berkeley, and Singapore and by funders like Social Venture Partners. These competitions attract thousands of social entrepreneurs all over the world.

The success and promise of social entrepreneurship have led to changes in philanthropic and business practice. Philanthropists and foundations are increasingly adopting a venture philanthropy approach alongside more traditional philanthropic giving; for example, the Bill and Melinda Gates Foundation hosts the Reinvent the Toilet Challenge, and the United Nations created the Social Impact Fund. Some businesses have practiced corporate venture philanthropy: Unilever Foundry helps develop social entrepreneurs, and Danone supports 10 social entrepreneurial ventures in water and nutrition through the Danone Communities program.

Social entrepreneurship is not based on patent-protected ideas or technologies; it is premised on the willingness to reexamine assumptions about health care delivery. Governments and private health care practices, as well as NGOs, have learned from social entrepreneurs. Well-established NGOs (eg, BRAC in Bangladesh, Population and Community Development Association in Thailand, and Oxfam) have adopted some social entrepreneurial practices, and some governments now promote social entrepreneurship.

Despite the rapid growth of social entrepreneurship, it is not clear that all social entrepreneurs can sustain and scale up their models to serve more communities in different countries. Research on health social entrepreneurs is needed and should go beyond case studies and stories to more systematic research. Social entrepreneurship is not a panacea; social ventures can fail or produce unintended consequences. Basic research is needed to develop a taxonomy of social entrepreneurial models in health; to evaluate the health, social, and economic benefits of these models; and to identify factors associated with the success, effectiveness, or failure of social entrepreneurship in health.

ARTICLE INFORMATION

Conflict of Interest Disclosures: Both authors have completed and submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest and none were reported.

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