

## Using Community Based Participatory Research to Improve Environmental Health

NIEHS GEH Podcast

**Narrator:** This is Global Environmental Health chat, the podcast that explores environmental health issues that transcend national boundaries. This podcast is produced by the National Institute of Environmental Health Sciences.

In public health, community based participatory research, or CBPR, views communities as social and cultural entities, each with their own set of unique perspectives, strengths, and challenges.

Today we'll hear about how NIEHS is working and collaborating with researchers, from Iowa to India, to empower communities to overcome challenges in environmental health.

Dr. Edith Parker is Dean of the University of Iowa School of Public Health. She finished her graduate training in CBPR in 1995, a time before this new, collaborative approach was fully recognized for its value. The approach involves all stakeholders – community members, organizational representatives, and researchers – as equal participants in the research process.

**Edith Parker:** “Community Based Participatory Research, or CBPR, as we call it is really a different approach to research in the sense that it requires that the researcher partners with communities and work with them in the partnership approach. So, it's thought to give us a chance to enhance the research itself. That's why I think some of the value of CBPR and why it's increased in popularity and use in recent years.”

**Narrator:** In her first professorship at the University of Michigan, Parker worked with a partnership, grounded in CBPR, called Community Action Against Asthma. During the process, community members voiced their concerns about air pollution, and its impact on urban neighborhoods and children with asthma. The community identified research priorities and played a role in writing a grant that was funded by NIEHS and the EPA.

The process illustrated the importance of connecting with communities and translating research.

In her current position at University of Iowa, Parker holds these, and the other principles of CBPR close.

**Edith Parker:** “I don't know what the lived experience is in the community that I might not live in. I now live in Iowa City, but work in rural Iowa, so I really need the viewpoints of the community members in rural Iowa to figure out how best to design the research.” “The second thing is that it might increase the chance for designing an intervention that can be sustainable, because you have the community around the table at the start as you begin the process.”

**Narrator:** Similar to Parker, NIEHS saw the value of CBPR in the 1990s. NIEHS has long believed that by building partnerships, researchers can better meet the needs of communities, especially those with socially, economically, and medically disadvantaged members. But that doesn't mean CBPR is easy.

**Edith Parker:** "If you're going to build a partnership and build trust and spend the time with each other to get to know each other and develop research, it's going to take time on both folks' part." "For community members, it's not their primary job." "For the academic who also has to teach and do service, spending time away in the community may not be recognized the way it should be."

**Narrator:** These CBPR obstacles don't exist solely in the United States. That's why NIEHS worked with Parker to expand CBPR's reach outside of rural Iowa—and to the opposite side of the globe, for a workshop called "Advancing Environmental Health Research and Translation in India Through Community Based Participatory Research Methodology."

Parker helped identify a partner in India who embraced CBPR and was eager to strengthen the role of CBPR in environmental research.

**Edith Parker:** "When we were looking for academic partners, this name Rajesh came up with his organization, Participatory Research in Asia, and I had actually read his work for years when I was a student. When we reached out to him, he was excited for his organization to partner with us."

**Narrator:** Dr. Rajesh Tandon founded Participatory Research in Asia, or PRIA, a nongovernmental organization, in 1982. He is the president of the New Delhi based organization, which has field offices in eight states in India. The organization's network is far-reaching, with links to more than 3000 nongovernmental organizations.

Much like Parker, Tandon began his career working in rural regions where he felt a strong disconnect between the community, their needs, and researchers.

**Rajesh Tandon:** "I discovered that knowledge of local, illiterate farmers on many matters was far more authentic than my own. And the method of research I was taught to use did not involve them in either framing research questions or generating data and analysis."

**Narrator:** Soon after, Tandon read a paper on participatory research. He started thinking about how he might apply his new knowledge to involve communities in the research process. Though his early work took place in rural areas, PRIA has become increasingly focused on urban communities.

**Rajesh Tandon:** "India has become a rapidly urbanizing country. It is also a young country; nearly half of our population is below 25. As a result, new opportunities for participatory research as well as training the next generation – the young people – in use of this methodology, has a reason."

**Narrator:** PRIA began working with impoverished young people living in urban, informal settlements. Some of the settlements didn't appear in any official records. It was as if they didn't exist.

Because of this, youth living in the community didn't have access to basic services, like water and sanitation. PRIA started the dialogue between youth and officials. In the end, these poor communities were recognized as legitimate inhabitants of the city with equal rights to water and sanitation.

Despite the success, there is still a divide between the government, researchers, and communities when it comes to solving environmental health problems.

**Rajesh Tandon:** "Problems in the communities, problems that require urgent solutions are not the focus of academics and professionally trained researchers." "Research funding as well as academic careers are limited to traditional, academic, in the lab, inside the university research."

**Narrator:** Because of the lack of funding in India, academic institutions don't usually practice CBPR. Speakers at the workshop discussed environmental issues, like air pollution, pesticide exposure, environmental disasters, and how CBPR methods used in the United States might be adapted for India.

The workshop served as an opportunity to help Tandon and other academics identify strategies to use in CBPR research.

**Rajesh Tandon:** "As Indian partners, we learned a great deal from American colleagues who brought not only the knowledge from the methodology, but also the research funding system applicable there, which incentivizes CBPR."

**Narrator:** The collaboration didn't stop after the meeting. There's already talk about collaborations between Indian and American institutions. One would involve a collaborative exchange, with a researcher from India coming to learn how CBPR is taught in the U.S. The other would involve a partnership with PRIA to create an educational campaign around air quality in India.

Parker and Tandon are pleased that the workshop has been beneficial to both parties and are excited to see these efforts continue to promote CBPR and public health in the future.

**Narrator:** You can learn more about CBPR by visiting our website at [www.niehs.nih.gov/GEH](http://www.niehs.nih.gov/GEH). Thanks again to Dr. Edith Parker and Dr. Rajesh Tandon for joining us today. You've been listening to Environmental Health Chat, brought to you by the Global Environmental Health program at the National Institute of Environmental Health Sciences.