A conversation with Vital Strategies, March 18, 2020

Participants

- Daniel Kass – Senior Vice President, Environmental Health, Vital Strategies
- Sumi Mehta – Senior Epidemiologist, Global Environmental Health, Vital Strategies
- James Snowden – Senior Research Analyst, GiveWell

Note: These notes were compiled by GiveWell and give an overview of the major points made by Mr. Kass and Dr. Mehta.

Summary

GiveWell spoke with Mr. Kass and Dr. Mehta of Vital Strategies about its work on policies to reduce air pollution and lead exposure. Conversation topics included Vital Strategies' overall approach to policy advocacy, specific project areas within air pollution and lead exposure, the funding landscape for environmental health, and funding opportunities.

Vital Strategies' general approach

Vital Strategies believes that changing government policy is an important tool for improving public health. It works on air pollution and lead control, among other areas.

Air pollution

Vital Strategies believes mitigation of air pollution is underfunded relative to emissions reduction more broadly.

Interventions to reduce carbon emissions will generally reduce air pollution. Measures targeted at population centers will have a greater impact on the health consequences of air pollution and may also generate additional public support for emissions reduction. There are interventions that have proven effective against leading sources of air pollution in most low- and middle-income countries (LMICs).

Areas of work on air pollution

Improving public understanding

Vital Strategies conducts media studies to learn how people talk about air pollution and its sources. This can then inform messaging to improve understanding of the health risks (particularly in cities, where the impact of education is greater) and of major sources of air pollution.

This research has shown a tendency to focus on variation in air quality and interventions that purport to address this, like driving restrictions by license plate or relocating a factory to a city's outskirts. These have little impact on exposure to

pollutants, but resonate because they fit a popular narrative that air quality fluctuates day by day. Governments are thus often not held accountable when these interventions fail, leading to further inaction. Vital Strategies would like to work with government and non-governmental organizations (NGOs) on public education campaigns to shape thinking about air pollution sources and solutions.

Assessing the public health burden

Ministries of planning, energy, and finance typically do not incorporate public health effects into their goals, so their plans often do not reflect a true accounting of costs and benefits. The public health sector can contribute by estimating the real burden of air pollution on health and cognitive development.

One example of this work is a Vital Strategies project in Indonesia, funded by UNICEF, which seeks out better data to estimate the country's air pollution burden, particularly its effects on children's health. As part of this project, Vital Strategies is also reviewing specific policy proposals from government and NGOs and estimating the potential short- and long-term benefits of each.

Technical support

Vital Strategies has published an innovations guide to help cities rapidly understand their air pollution problems and implement effective solutions, with the goal of accelerating action. Many cities in high-income countries have moved slowly to develop clean air plans, and implemented solutions dependent on national rather than local action. New technologies to measure pollutants, better data management systems, and better methods for identifying pollution sources mean that cities in LMICs can act faster given some technical support.

For example, in Jakarta, Indonesia, Vital Strategies has helped to identify relevant air pollution sources, secured a commitment from the city to invest in pollution measurement, and helped develop a clean air plan, all in less than a year. Jakarta is now better positioned to consider the policies most likely to have an impact, rather than trying out policies indiscriminately. Vital Strategies believes this work validates its theory of change, which is that evidence-based advocacy yields investment.

Household air pollution

Household air pollution, from burning charcoal and biomass-based fuels for cooking or heating, remains a major issue, resulting in 3.8 million deaths per year worldwide. Household air pollution increases exposure for residents of poor households and, along with agricultural burning and peatland fires, is a leading contributor to ambient pollution.

Several decades ago, philanthropic funders and development banks invested heavily in "clean cookstoves," without changing the type of fuel used. The evidence now shows that these cookstoves did not reduce exposure to pollutants. That experience, plus a general shift toward focusing on cleaner fossil fuels instead, has led some

donors, such as Bloomberg Philanthropies, to move away from funding work on household air pollution.

There is momentum toward reduction of household air pollution in India, where the government launched a campaign to provide clean energy to 80 million poor households. However, the campaign focused mainly on increasing access and less on promoting sustained use of clean energy sources that would effectively replace polluting sources. Vital Strategies has done some initial work with the Indian government to try to ensure that the campaign yields real public health benefits.

City- vs. country- and state-level work

Vital Strategies believes assistance at the city level can be very effective. It costs $200,000 to $300,000 per year to help a city plan and implement an air pollution reduction program and provide some technical support for studies and public education campaigns. This "adopt-a-city" approach typically involves embedding Vital Strategies staff within the city government. The evidence yielded by this level of investment is often enough to convince cities to invest their own resources.

The city-based approach works because cities can often take steps toward improving air quality without involvement from higher levels of government. Jakarta, for example, has a large vehicle burden. To reduce air pollution, it can introduce subsidies for mass transit to reduce the number of cars on the road and decide what kind of vehicles will be procured for city bus fleets.

In India, Vital Strategies is also considering support at the state level; this would allow it to support multiple cities at once, which is useful for driving change on a national level. Similarly, in Indonesia, supporting other islands or cities along with Jakarta could achieve a critical mass of activity and drive national change.

Working in capital cities, such as Jakarta or Addis Ababa in Ethiopia, can also provide connections to the national government, which can help foster policy changes at the state and national levels.

Current cities and criteria for selection

Vital Strategies currently works on air pollution primarily in Jakarta. It is also scoping work in several Indian cities and has more limited engagements in Addis Ababa, Ethiopia and Hanoi, Vietnam. These cities were chosen in part based on their air pollution burden, but opportunity based on Vital Strategies' strengths and established presence in those geographic areas also played a role.

Lead control

Program in Peru

Vital Strategies currently works on lead regulation policy in Peru only. Lead is recognized as a problem in Peru, but is associated specifically with mining, particularly in indigenous communities. Because of this, lead exposure has come to

symbolize exploitation on a larger scale, eliciting a government response based on political concerns rather than health.

In Peru and many other countries, lead paint is a significant source of exposure but is not recognized as such. Peru has some regulations on lead in children's products, but lacks a robust system for analyzing lead content. Vital Strategies is working with the Peruvian Ministry of Health to create a lead surveillance program, to help the government better understand sources of lead exposure and ultimately improve clinical education and enable policy changes.

Potential future areas of work on lead

Vital Strategies would like to launch similar lead programs in other countries. Most LMICs do not have the strong systems for reducing individual exposure to lead that exist in high-income countries. Vital Strategies does not expect to replicate these strong enforcement systems in LMICs, but believes surveillance is important for monitoring the continued introduction of new lead into the environment.

Vital Strategies is also interested in working on lead control at a global level. For example, the World Health Organization (WHO) has created a set of basic tools to help countries regulate lead levels in paint, a package similar to one WHO has used to encourage trans fat elimination. However, progress has been limited because the WHO plan does not provide assistance to countries to generate local demand for regulation. Vital Strategies plans to publish an op-ed calling on governments to impose an international ban on lead paint, though such a ban is unlikely to happen.

Funding

Funding landscape for environmental health

Important funders of environmental health activities include Bloomberg Philanthropies and the Children's Investment Fund Foundation (CIFF).

Funding is largely segmented between climate-focused and public health–focused work. Much philanthropic spending on air pollution goes toward climate change–focused programs, such as energy sector conversion or technical support for transportation systems, which do not aim to improve public health. There is also significant support for pollution monitoring technology, such as low-cost sensors.

Vital Strategies believes that enough is known about effective solutions that implementation and monitoring can be worked on simultaneously. More than 90% of the world's population lives in areas where air pollution exceeds WHO guidelines, yet relatively little funding is available for policymaking assistance and implementing solutions compared with monitoring. Vital Strategies sees its greatest value in providing phased assistance to implement evidence-backed solutions and accelerate improvements in air quality.

Bloomberg Philanthropies

Bloomberg Philanthropies and the IKEA Foundation have set up a network around climate goal-setting, including a light-touch technical assistance program in which coordinators help cities with carbon planning.

Bloomberg periodically contributes to a program that lobbies against the coal industry, but this program is focused on climate and not on public health.

CIFF

CIFF funds C40, a global network of cities committed to carbon reduction goals. CIFF recently added an air pollution program to C40, attempting to leverage existing work on environmental health to bolster planning on air pollution. This program is very new, but promising.

CIFF, along with the IKEA Foundation and other funders, also recently launched the Clean Air Fund, which has so far raised $50 million to support air pollution work. Although it appears this will be a major future funder, and Vital Strategies is aware of possible planned work in India around communications, the project is still largely in the scoping stage.

Vital Strategies does not currently receive any funding from the Clean Air Fund. Many of the organizations supported by the fund have preexisting relationships with the funding partners.

Vital Strategies' expenditures and funding sources

Vital Strategies is self-funding much of the foundational work it does on air pollution. It receives about $800,000 per year combined from Bloomberg Philanthropies and UNICEF for air pollution, and $300,000 per year for its lead program in Peru, plus smaller amounts from other sources. Vital Strategies also regularly applies for USAID technical support funding for specific countries. The total cost of Vital Strategies' environmental health program is approximately $2 million per year.

Bloomberg has provided support for formative work, such as developing the clean air innovations guide for cities. Vital Strategies hoped that this would lead to launching implementation phases in multiple cities, but so far this has not happened.

Funding opportunities

Given an extra $5 million over three years for its air pollution work, Vital Strategies would likely use most of the funds to do a deep dive in some cities (providing guidance and materials and developing a campaign launch), and the rest to provide limited assistance in a larger number of cities (extrapolating some of the above elements and providing modest technical assistance).

One of Vital Strategies' lighter-touch engagements is the Partnership for Healthy Cities program, which offers small grants to cities to accelerate work on non-communicable diseases and injuries and their risk factors. Most of the air pollution work funded by this program has been in higher-income cities. For example, Vital Strategies gave a small grant to Paris, which already had a strong air pollution monitoring network; however, the grant enabled the city to identify a few buildings that contributed significantly to pollution from high-sulfur fuel, and use this information to ban the fuel.

Several East African cities would likely be interested in this kind of modest support; some might need active implementation support, while others could benefit from a lighter-touch program that would position them to implement more effectively. (Air pollution in sub-Saharan Africa has received relatively little attention, despite growing urbanization and development.) Centering more intense efforts on one city would provide a path to lighter-touch engagement in many surrounding cities.

If Vital Strategies had 10 years' worth of funding, it might engage in deep dives with some cities, then "graduate" those cities and move on to others.

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