

VIEWPOINT

Inspire Hope, Not Fear: Communicating Effectively About Climate Change and Health

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HEALTH CARE PROFESSIONALS HAVE A VITAL ROLE TO PLAY

Why Now, Why Us? When I first learned about climate change 15 years ago, I was the medical director of a rural community health center in northern California. I was too busy to do anything more than click on climate change action alerts, but I assumed activists and experts would take care of the problem and we still had plenty of time. When our rivers started to dry up and wildfires filled the sky with smoke, I did more clicking, increased my donations to environmental groups, and waited for a leader to issue instructions. By the time dust storms raised valley fever rates 8-fold¹ and *Aedes aegypti* mosquitoes—the most effective vectors for dengue, yellow fever, and chikungunya—found a new home in California,² I realized we were running out of time and that leadership had to come from people like you and me.

The window of opportunity to prevent catastrophic climate change is closing. The year 2015 will mark either a historic global accord aimed at dramatically lowering greenhouse gas emissions or our last, lost opportunity to preserve a livable planet for future generations. Our current emissions path, including the proffered international commitments to date, will cause average global temperature to rise more than 2°C above preindustrial temperatures, possibly as soon as mid-century.³

Health professionals have untapped power to influence what happens at this critical juncture: We are trusted messengers.⁴ We have experience translating scientific information into plain language for individuals and communities. We have a growing base of evidence documenting the negative

health consequences of climate change and the positive health (and therefore economic) benefits of mitigation.⁵ And, in a health landscape dominated by chronic disease, we have experience from our daily clinical practice in motivating behavior change.

This is a call to action. With international negotiations showing little cause for us to be optimistic about closing the gap between political expedience and necessity, it is time we as health care professionals step forward to put these powerful assets to use. **Leading From Below.** I was never a comfortable or confident speaker, but in 2012 my husband and I set off across the country by bicycle on a speaking tour about climate change and health. Since that time I have given hundreds of talks to groups ranging from small-town Rotary Clubs to grand rounds at major medical centers. My initial nervousness resolved as I discovered that my high standard for polished presentations was self-imposed. Audiences value sincerity and reliable information delivered in terms they can understand. I found that people want to hear what health professionals have to say about climate change and our colleagues want to know how they can help. The most important thing we can do is stand up and tell them because political pressure applied by active citizens is the only force that can divert us from our crash course with disaster.

In my travels as an itinerant climate preacher, I met many colleagues and students who also wanted to take action but felt isolated and unsure of what to do. Together we formed Climate 911, a national network to mobilize and support health professionals calling for climate action. Our activities include workshops on best practices in climate/health communication, lobbying, op-ed writing, and monthly collective action in support of a healthy climate

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solution such as clean energy, active transportation, and sustainable agriculture. Please join us by signing up at www.climate911.org.

The following information is a distillation of best practices in communicating about climate and health gleaned from personal experience and the growing body of published literature on climate communication.

RETHINKING OUR COMMUNICATION STRATEGY

Fear Doesn't Work. The first attempts by public health professionals and environmentalists to educate about climate and health were inspired by climate communication research demonstrating the benefit of framing climate change as a health issue.⁶ The central message deployed in response to this finding, which remains the dominant narrative, is a depressing litany of all the ways that climate change can make us sick. The intended purpose of these scare talks was to prove to nonbelievers that climate change is real and serious. This strategy was based on 3 erroneous assumptions: (1) people need to be convinced that climate change is real and serious; (2) fear motivates action; and (3) we all have to agree on the problem before we can agree on solutions.

As some of us suspected from our experience in clinical practice, fear tactics do not promote activism, but instead provoke denial, passivity, and fatalism. My early climate presentations in this vein were quite successful at generating concern but produced little in the way of action.

We Have a Silent Majority. In our politically polarized society, opinion about climate change is determined more by group allegiance than scientific fact.⁷ Fortunately, agreement is not a prerequisite for action. Communication aimed at reversing climate denial is at best a waste of time and at worst can alienate and silence potential allies. If we skip over the climate catechism and its ideological battleground and look directly at public support for climate policy, there is a surprising amount of agreement. Even in the United States, where public opinion lags behind other nations, polls repeatedly indicate that a majority of Americans in both major political parties and in red and blue districts believe our government should do more about climate change and support a broad spectrum of policies to lower greenhouse gas emissions.^{8–10} When questions about belief in the human causation of climate change are added to polls, majority support goes away.¹¹

If lack of public support for climate policy is not the problem, then the sticking point must be elsewhere. Further examination of US polling data confirms a theme I heard repeatedly in conversations across the country: People don't believe they can get government to act and therefore do not bother to demand it. We suffer from an endemic lack of political efficacy. This widespread belief that voters have no power partly arises from the common misconception among supporters of climate policy that they are in the minority, but it is also due to the very real observation that large campaign contributions from the fossil fuel industry subvert democracy and induce politicians to act against the wishes and interests of their constituents.

Given that time is limited, we should stop trying to scare people out of denial, stop trying to convince deniers that climate change is real, and focus our efforts on empowering the rest of us to stand up and demand climate solutions.

THE ELEMENTS OF EFFECTIVE COMMUNICATION ABOUT CLIMATE CHANGE

Identify the Target and Focus. Effective messaging about climate change is communication that results in action. Governments have proven they will not act without strong and sustained pressure from their citizenry. Polls indicate that as much as one third of Americans are willing to use their votes and/or join a political campaign to make elected officials to act on climate change,¹¹ but this is not happening. What we need to tap into this potential energy are the voices and leadership of respected members of our communities. This dictates a change in our communication strategy from top down (ie, experts testify before politicians who ignore the facts and serve the interests of their industrial benefactors) to bottom up (ie, we all educate and mobilize the people around us to exert pressure on politicians and to replace those who persist in climate inaction). We should choose who we talk to, what we say to them, and how we say it with this specific goal in mind.

Establish a Connection. Get personal. Although our titles and education give us some credibility, what listeners need to make the move from angst to action is to connect with us as human beings. Listening to "experts" can reinforce passivity. For an audience to begin seeing themselves as actors, they have to see themselves in us. The depersonalized, passive voice of the scientific lecture will not serve this purpose. We must set it aside and let people

see beyond our credentials to who we are, how we feel, and why we care. Introduce yourself, name the common ground you have with your audience, and share a brief story about a personal experience or a deeply held moral value that prompted you to stand up for climate action.

Know your audience. It is equally important to acknowledge to listeners that you know who they are by tailoring your presentation to their community, locale, values, and concerns. Be sure to select images of people who mirror the age and ethnic mix of your audience. When discussing the health impacts of climate change, fossil fuels, and climate solutions, bring them as close to home as possible. Information at county, state, and regional levels broken down by demographic group can often be found online with a little searching. These are the things people will go home and talk about, so conducting the research to tailor your presentation is well worth the effort.

Acknowledge Emotions. Contemplation of climate change provokes strong negative emotions such as fear, sadness, anger, and anxiety in almost everyone. Eco-psychologists caution that emphasizing the dangers of climate change and warning of a future dystopia activates psychological defenses as a way to escape emotional discomfort.^{12,13} If people are in denial, more facts only fortify their resistance. Nor is it helpful to swing the pendulum too far in the other direction and paint a rosy picture of a low-carbon future. Ignoring the losses we inevitably face on a changing planet leaves us unable to work through our guilt and grief and keeps us trapped in denial.¹⁴

Attention to feelings is important because research indicates that strong negative emotions correlate with low levels of support for climate policy, whereas positive emotions like interest and hope are associated with increased support of climate action.^{6,15} Joanna Macy, eco-philosopher and Buddhist scholar, believes we must first acknowledge and accept our painful emotions around climate change before we can have hope and think clearly about solutions.¹⁶ Therefore, we cannot be in denial about being in denial. We have to help people move through this stage by acknowledging the negative feelings we all have about climate change, thanking listeners for being willing to make themselves uncomfortable, and reassuring them that there are solutions and actions they can take.

Be Aware of Cognitive Processing and Biases. Balance emotional and intellectual content. The fields of cognitive psychology and neurobiology provide useful insights into how people process information, which

can inform our climate communication. Experiential processing, centered in the amygdala, is emotional, visual, rapid, intuitive, automatic, and based on past experiences. Analytic processing, located in the anterior cingulate cortex, is intellectual, abstract, rational, and deliberative. Survival responses occur in response to experiential processing cognition, which may explain why scientific appeals to reason fail to galvanize public action.¹⁷ To generate passionate and thoughtful advocacy, we need to address the heart as well as the head.

Focus on the here and now. We are also prone to perceptual distortions that predispose us to irrational responses to climate change. We accept the status quo as our moral baseline and view any sacrifice or loss in the service of improvement as an unjust theft of something to which we are entitled. We abhor the loss more than we appreciate gain. We discount the importance of events that are distant in space or time and lend more importance to small effects with high probability than to large impacts with more uncertainty.^{18,19} Things that may happen at the end of the century are meaningless to the average person. Harms and benefits are only compelling if they happen here and now.

Tell stories. We are not cognitively wired to respond appropriately to slow-onset threats like climate change that require current and sustained sacrifice to avoid future risk.¹⁸ We are superbly wired for stories. Functional magnetic resonance imaging studies performed while participants read or listen to stories show activation of sensorimotor regions corresponding to the actions and experiences of story characters and increased connectivity that lasts for days afterward.²⁰ We are so naturally receptive to this form of communication that the cortical activity of a story listener mirrors that of the teller.²¹ Stories about people and places where climate solutions are working provide vision, inspiration, and a sense of positive momentum toward a sustainable future.

Emphasize Solutions and Benefits. Be positive. If dire predictions don't motivate action, the solution is not to make them scarier. Repeated exposure to stressful stimuli creates psychic numbing and we learn to sleep through the alarm.¹⁸ Vision, solutions, and a sense of momentum are positive motivators for change.²² Although some mention of the health harms is necessary to build a sense of urgency, our main emphasis must be on solutions and their benefits.

Our message must be one of hope. "Successful climate solutions are happening all around us.

They come with a bonus of improved health and well-being. We need only generate the political will to rapidly scale up these successes to state, national, and international levels to prevent catastrophic global warming. If we act now, we can transition to 100% clean energy by 2050. We can get 80% of the way with existing commercially available technology.^{23–25} We can afford to do this because the decreased health spending and economic losses averted by preventing premature mortality are equal to or exceed the cost of switching to clean energy.^{26,27} The hold of Big Oil on government can be broken by an active, engaged citizenry. Please join us.”

Emphasize health benefits. The health benefits of climate solutions are substantial because fossil-fuel dependence really does make us sick. Our own health professions are victims of status quo bias in their near-exclusive focus on technological cures for diseases of environmental origin. There is solid evidence that air pollution, physical inactivity, and consumption of sweetened beverages and processed foods—which are themselves products of our fossil-fuel-intensive systems of energy, transportation, and agriculture—contribute significantly to cardiovascular disease, chronic lung disease, obesity, diabetes, and cancer^{28–30} The effects are not small. Massachusetts Institute of Technology researchers estimate that in 2005, air pollution from fossil fuel killed 200,000 Americans.³¹ Unlike climate change, these environmental effects of fossil fuel are rapidly reversible and result in prompt improvements in population health. The benefits of action are here, now, and relevant to almost everyone in our society.

Explain the Difference Between Policy and Individual Action. It is essential to make it clear that the solutions we advocate are policies rather than changes in individual behavior. Global emissions reductions sufficient to stabilize the climate can only be accomplished by government action and international cooperation, but this is not what most people think of when they think about climate action. In the face of corporate dominance of the political process, many people feel the only power they have is to vote with their dollars by greening their personal lifestyles.

Those who subscribe to this view of environmental action by consumer choice may feel guilty if their options are constrained by income or circumstance or become defensive if they think they are being told what to do. Acknowledge the difficulty of swimming upstream against the main current of society and ask for support of policies that make

healthy choices easy and available to everyone. Although it may seem counterintuitive, those who factor environmental concerns into their purchasing are not more likely to become climate activists. Token or single environmental actions relieve moral tension and absolve the actor, in his or her mind, of the responsibility to engage politically as a citizen.¹⁷

Educate to Empower. Because our goal is to build political efficacy, the way we deliver information is as important as the content. Successful education starts from where people are and builds on their life experience, using analogies, anecdotes, and common sense to construct a bridge between the known and the new. Use accessible language that is clear and straightforward. Avoid jargon and the use of big words if small ones will do. Use numbers sparingly, round off, and translate units of measure to those in common use. Describe solutions in terms of what matters most to your audience—that is, “stop air pollution” instead of “lower greenhouse gas emissions.” Describe events in terms of their effect on people rather than the planet. For example, say “flood” instead of “heavy rain.”³²

Employ interactive learning such as group participation in scenarios and problem solving, and use questions and comments as springboards for discussion. Encouraging members of your audience to talk and respecting what they say increases confidence, underlines the richness of community assets, and provides opportunities to practice talking about climate issues.

CONCLUSION

Keeping silent on climate change is not an option for health professionals because climate change is a major health justice issue. Climate change magnifies the burdens of poverty, injustice, and unfavorable social determinants of health, increasing vulnerability to climate-related disease and disasters. It also offers an unprecedented opportunity to improve public health and promote equality by targeting investment in efficient housing, public and active transportation, walkable neighborhoods, distributed clean energy, and local food production to neighborhoods whose residents have the greatest needs. As professionals whose mission is to promote health, this is clearly our business.

Most health professionals personally want climate action but hesitate to speak out publicly because they do not consider themselves experts. A frontline health worker’s knowledge about climate change may not be as detailed as a researcher in academia, but we are all experts in our own

communities. Grounded in science and providing care for society's most vulnerable members, we are best placed to understand and explain the local harms of inaction and the "here and now" benefits of tapering off fossil fuels. Everyone wants good health for themselves and their loved ones, and

this common aspiration can be a powerful incentive to demand that our governments do more to lower greenhouse gas emissions. As trusted messengers, skilled communicators, and local experts, health professionals have a critical role to play in building public pressure for climate solutions.

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