OBJECTIVES OF THIS REPORT

We have an ambition to encourage the Indian healthcare community to take greater action on the air pollution challenge.

To achieve this aim, we conducted comprehensive research among the Indian medical community to:

- Understand how key health communities in India perceive air pollution.
- Explore what kinds of communications and strategies would encourage them to act on the issue, and what stops them from acting on air pollution today.

The findings within this report are based on 16 in-depth qualitative interviews and a quantitative survey with 200 Indian healthcare professionals.*

CONTENTS

This report is structured in 5 parts:

1. **Key take-outs and strategic recommendations for driving action among Indian HCPs (Health care professionals)**
2. **HCP Personal-Professional Motivations**
3. **Indian health culture**
4. **Indian HCP perceptions of air pollution**
5. **Summary of key motivators and barriers to action on air pollution**

*See appendix for detail on sample
PART 1
KEY TAKEOUTS AND STRATEGIC RECOMMENDATIONS
In order to act on any issue HCPs need high levels of both:

**AGENCY + ISSUE MOTIVATION**

HCPs that feel empowered and in control of their actions and their consequences. This creates perceived ability to act. When an issue is perceived as important at both a public health level but also to HCPs as individuals with their own ambitions and values. This creates desire to act.

- **HIGH AGENCY**
  - **INSPIRED ACTION**
    - HCPs have the desire to act and feel empowered to do so.
  - **VOLUNTARY DISENGAGEMENT**
    - HCPs have the means to act, but don’t want to.

- **LOW AGENCY**
  - **FRUSTRATED INTENTIONS**
    - HCPs want to act, but do not have the means.
  - **DISEMPOWERED INDIFFERENCE**
    - HCPs neither want to act, nor have the means to do so.

- **HIGH ISSUE MOTIVATION**
  - **INSPIRED ACTION**
    - HCPs have the desire to act and feel empowered to do so.
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    - HCPs have the means to act, but don’t want to.

- **LOW ISSUE MOTIVATION**
  - **FRUSTRATED INTENTIONS**
    - HCPs want to act, but do not have the means.
  - **DISEMPOWERED INDIFFERENCE**
    - HCPs neither want to act, nor have the means to do so.
We found that Indian GPs and Specialists sit in the ‘voluntary disengagement’ space.

These HCPs have the means to act, but don’t make it a priority. The air pollution issue requires greater prominence and urgency.

Nurses, midwives, pharmacists and community health workers are likely to feel ‘disempowered indifference.’

These HCPs neither want to act, nor feel able to do so. The air pollution issue requires greater prominence but they also need greater permission and freedom to act.
There are 5 personal-professional motivations that spur HCP action

These motivations tend to be shared with HCPs around the world and reveal potential drivers and barriers for acting on public health issues:

**SECURITY**
“I want to get through the day unscathed.”

**CARE**
“I want to give meaningful help to individuals”

**COMMUNITY**
“I want to belong and to contribute to the collective”

**DUTY**
“I want to fulfil my role and act as a role model for others.”

**GROWTH**
“I want to be leading challenges.”

*HCP considerations for acting on public health issues*

- Can I make time and headspace for this issue?
- Am I too junior to act?
- Does it fit with the official rules and guidelines?
- How will my action enhance the lives of my patients in a meaningful way?
- How will my action make tangible, positive changes within my community?
- Does acting on this issue help fulfil my duties as a health professional?
- Will my efforts be rewarded with high status recognition?
- Is acting on this issue a good use for my skills and status?
- Does acting on this issue create any risks to my reputation?
Indian Health culture gives most HCPs a good sense of agency, despite a challenging environment.

A health system that excels for some, but is basic for most
There is a culture of excellence in specialist roles/centres but many in the population still live without basic healthcare measures.

A dual burden of infectious and chronic disease
HCPs are often fighting to control infectious disease, while conditions such as diabetes, hypertension and cardiovascular disease are also rising.

Strong hierarchy between HCP roles
GPs and Specialists enjoy exalted status within Indian society, while nurses, pharmacists, community workers and midwives will often defer to their authority.

A strong duty to help others with their skills
HCPs are conscious of their fortunate position and the struggles faced by others in society. This creates a strong imperative to use their skills for charitable purposes.

Cultural and government issues undermine action
Oriental fatalism, the rise of fake news, and persistent government corruption all work to undermine wider systemic improvements.

65% Indian HCPs surveyed have taken action on a public health issue in the past.
They are willing to act on public health issues, but only **36%** Indian HCPs consider air pollution to be a priority.

There are many tangible signals of poor air quality in India such as visible smogs that lead to everyday inconvenience and respiratory irritation.

Yet despite the fact that 65% Indian HCPs are inspired to take action on public health issues, only 34% believe that air pollution is a priority public health issue, suggesting that they are likely to deprioritise it when acting on public health more generally.

*Priority public health issue* refers to the % HCPs who ranked air pollution as an urgent issue (in their top 10)
Air pollution is a recognised problem and 71% have taken some form of action – mostly to advise patients.

But HCPs also often deprioritise it vs other issues, and it does not often feature in the strong culture of NGO/Charity work.

<table>
<thead>
<tr>
<th>Reason</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Being overwhelmed by more immediate problems</td>
<td>Indian HCPs are more focused on implementing basic healthcare measures, dealing with both chronic and infectious diseases, and managing a system that is under strain from population growth.</td>
</tr>
<tr>
<td>Low awareness and evidence of health impacts</td>
<td>Many associate air pollution with respiratory discomfort, but do not always recognise the more severe long term effects. Doctors who seek further information find that it is lacking.</td>
</tr>
<tr>
<td>Lack of practical solutions for an Indian context</td>
<td>HCPs feel that many solutions are designed for a developed world context, and that it is hard to give patients advice that they are able to follow in practice.</td>
</tr>
<tr>
<td>An environmental problem, for higher powers to solve</td>
<td>HCPs don’t see it as their role to intervene in big systemic challenges. The government needs to tackle it as part of other issues, however, they do not trust it to handle the challenge with effectiveness and integrity.</td>
</tr>
</tbody>
</table>
There are three roles with high potential for Indian HCPs to take greater action

1. Research and knowledge sharing
2. Supporting NGO/Charity initiatives
3. Influencing their place of work

A hierarchical medical culture suggests that there could also be an opportunity to connect action with a degree of professional prestige.

The chart below shows how Indian HCPs responded to two survey questions:

1. How able they feel to act in certain roles
2. Action they have taken on air pollution

We have highlighted where there is both high ability and low action – revealing roles with the highest potential for greater HCP involvement.

- Supported an NGO or Charity initiative: 17%
- Sought to influence policies of government/regulatory/commercial organisations: 18%
- Sought to influence policies and practices of where I work: 21%
- Researched or shared knowledge with others: 30%
- Advised patient groups: 58%

Q11. Have you ever taken any action to tackle air pollution or to improve air quality?

Q12. If you had to take action to tackle air pollution now how would you rate your ability to undertake the following roles? (chart shows percentage who stated 5-7: ability to act)
WHICH LEADS US TO A STRATEGIC FOCUS OF:

**INCREASE EASE AND PRESTIGE OF PARTICIPATION**

To unlock HCP action in...
- Research and knowledge sharing
- Action in NGO/Charity campaigns
- Influencing places of work

**PRIORITY ACTION AREAS**

1. **EMBED INTO EXISTING HEALTH SYSTEM (AND NGO ACTIVITY)**
2. **FACILITATE AND CELEBRATE ROLE MODELS**
3. **GENERATE AND DRIVE EVIDENCE**
# Strategic Recommendations: India

## Key Areas for Acting on Strategic Focus

### Strategic Focus
Facilitate ease and prestige of tackling air pollution to drive greater action in research and knowledge sharing, support of NGO/charity initiatives, and influencing workplaces

### Priority Action Areas

<table>
<thead>
<tr>
<th>WHO</th>
<th>Embed into existing health system (and NGO activity)</th>
<th>Facilitate and celebrate role models</th>
<th>Generate and drive evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Which members of the HCP population should be targeted?</strong></td>
<td>- Embedding air pollution into training and hospital guidelines will particularly benefit HCP’s working in roles perceived as low status – e.g. Nurses, midwives, pharmacists and community health workers – to be aware of the challenge and feel empowered to act.</td>
<td>The priority is to target HCPs who are perceived as ‘high status” – GPs and Specialists. - Within these roles there is an existing drive for furthering their specialisms/achieving professional renown and success. - If more highly regarded HCPs are seen to be acting in AP, it will spur greater interest and action.</td>
<td>All HCPs  - Local evidence helps all HCPs feel justified in prioritising AP  - Specialists are looking for evidence that is tailored to the area/demographic that they work with.  - Generalist doctors such as GPs would be better served with data on the local situation.</td>
</tr>
<tr>
<td><strong>HOW</strong></td>
<td>Illustrative tactics</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Which members of the HCP population should be targeted?</strong></td>
<td>- Work with professional/teaching institutions to embed AP further in the curriculum. - Develop best practice guidelines for hospitals and clinics around air pollution. - Work with popular NGOs – e.g. rotary club – to integrate air pollution awareness and action in to their existing initiatives.</td>
<td>- Showcase the stories of when HCP intervention on AP has made a difference to an individual / within their local clinic or hospital - Work with medical associations to champion the work of HCPs who are acting. - Give HCPs a platform to present on AP at major health conferences</td>
<td>- Invite an ambitious cohort of doctors to lead research into AP and its effects. - Distribute monitors and empower HCPs to collect data for their local clinics/hospitals. - Campaign to raise awareness of the long term health impacts – targeting specialists with specialist data, and ensuring that their key demographics are covered.</td>
</tr>
</tbody>
</table>

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*Health Communities Research India*
Looking beyond the immediate priorities outlined in the previous slide, there are a number of further action areas that organisations looking to engage HCPs could consider as their trajectory for action. We have laid these out as horizons as certain areas depend upon the success of other areas before they can be successfully implemented.

**SEQUENCING OF FUTURE ACTION AREAS**

**HORIZON 1**
- Make air pollution visible and measurable
- Generate and drive evidence

**DRIVES URGENCY & ISSUE MOTIVATION**
- Embed air pollution guidance into health systems

**INCREASES AGENCY TO ACT**

**INDIA IS CURRENTLY AT HORIZON 1-2**

**HORIZON 2**
- Humanise the issue
- Facilitate and celebrate role models
- Make wider action easy and simple

**HORIZON 3**
- Create a community of HCP’s dedicated to the challenge
- Turn action into professional currency

---

= already sufficiently covered
= current priority area
= future action area
HORIZON 2
Deepening emotional engagement and increasing ease of action

- Humanise the issue
- Facilitate and celebrate role models
- Make wider action easy and simple

DRIVES URGENCY & ISSUE MOTIVATION
INCREASES AGENCY TO ACT

5. MAKE WIDER ACTION EASY AND SIMPLE

**TACTICS:**
- Creating and sharing templates for lobbying govt./businesses.
- Share a directory of organisations/individuals who they could contact.
- Provide bite-sized activities (e.g. possible to do in little time).

6. HUMANISE THE ISSUE

**TACTICS:**
- Identifying potential victims of air pollution and telling their stories.
- Tell the stories of how people's lives have improved as a consequence of small, everyday actions on air pollution.
HORIZON 3
Scaling action and engagement to the wider HCP community

7. TURN ACTION INTO PROFESSIONAL CURRENCY:
- Connecting air pollution to specific professional qualifications
- Showcasing stories of HCPs whose action on AP has helped them to achieve professional goals and growth.
- Share stories of HCPs successfully working with other actors of status (e.g. politicians, environmental leaders)

8. CREATE A COMMUNITY OF HCPS DEDICATED TO THE CHALLENGE:
- Creating online/offline platforms where HCPs can collaborate across hospitals and cities to improve air quality
- Convene citizens forums where HCPs can engage directly with communities on the issue.

DRIVES URGENCY & ISSUE MOTIVATION
INCREASES AGENCY TO ACT

Create a community of HCP’s dedicated to the challenge
Turn action into professional currency
PART 2
PERSONAL-PROFESSIONAL MOTIVATIONS
WE FOUND 5 PERSONAL-PROFESSIONAL MOTIVATIONS THAT SPUR HCPS TO ACT:

Summarising the motivation…

**SECURITY**
“"I want to get through the day unscathed.""

They are seeking…
"Financial and job security.  
A release from day to day stress.  
Successfully conform to existing systems and protocols.  
Financial or material reward ."

**CARE**
“"I want to give meaningful help to individuals""

"Seeing an individual/patient improve and recover  
Helping others to improve their lives.  
Relationship building with individuals.  
A feeling of altruism."

**COMMUNITY**
“"I want to belong and to contribute to the collective""

"Relationship building within their community.  
Recognition as a contributor.  
Perceiving visible improvements to their local networks.  
A feeling that they are part of something meaningful."

**DUTY**
“"I want to fulfil my role and act as a role model for others.""

"Gaining social respectability.  
Fulfilling their role as a healthcare professional.  
Correctly following scientific evidence  
Demonstrating competence to themselves and others.  
Demonstrating socially respectable behaviours to others  
Contributing to professional causes and challenges."

**GROWTH**
“"I want to be leading challenges.""

"Professional advancement and status.  
The buzz and stimulation of solving difficult problems.  
Being in the limelight, and seen as a source of inspiration (flattering their professional ego).  
Personal growth and challenge."

MICRO / INTERNAL FOCUS
Orientated towards their personal needs and relationships

MACRO / EXTERNAL FOCUS
Orientated towards how others view them

These are motivations that apply across the international healthcare community, although they are expressed in different ways in different cultures.
MOTIVATION #1

SECURITY

“I want to make it through the day unscathed.”
Security-driven HCPs are most often found working in hectic and low paying roles within the medical community.

The combination of an unrelenting role, plus their relatively low status in the medical community means that they don’t often have the headspace to think about causes beyond their day-to-day, and that their main focus is upon achieving basic needs such as financial stability, sleep, and taking care of their own health.

Among their pressures and concerns are:

- Overwork within their role
- Long hours
- Anti-social hours
- Demands to work at short notice / with urgency
- Under-compensation within their role, leading to financial worries
- Managing family and home life

They are most likely to be nurses, pharmacists, health workers, and midwives, but can also be GPs and Specialists who are junior in their career journey.

Desires of HCPS with a Security Mindset:

- Financial security
- Emotional security / freedom from stress
- Following official systems or protocols
- Extra financial or material reward
A FUNCTIONAL AND DEFERENTIAL MINDSET
SECURITY ORIENTATED HCPS PRIORITISE THE HERE-AND-NOW AND STICK TO DIRECTION AND GUIDELINES FROM THOSE WITH AUTHORITY

<table>
<thead>
<tr>
<th>RESTRICTIVE WORLD VIEW</th>
<th>REALIST, NOT IDEALIST</th>
<th>NON-CONFRONTATIONAL AND RISK AVERSE</th>
<th>DEFERENTIAL TO AUTHORITY AND PROCESSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life is about coping with multiple realities and not losing control.</td>
<td>They are hardworking but also aware that they have limited resources &amp; tools to work with.</td>
<td>Security-driven HCPs prefer to go with the flow.</td>
<td>They are either consciously or subconsciously aware of their juniority – either in terms of inexperience, or because they occupy a less “expert” role. Therefore, they look to seniors and official protocols for guidance.</td>
</tr>
<tr>
<td>This leads to an inability to see a bigger picture beyond daily life and roles.</td>
<td>Hence, recognize that their efforts can only go so far.</td>
<td>They do not wish to jeopardize their hard earned position, and are therefore are unwilling to take risks or make themselves stand out.</td>
<td>When they do have ideas or solutions for improvements to the system and services, these are often held back unless solicited or if others first provide similar suggestions.</td>
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</tbody>
</table>

Health Communities Research India
“There are too many tensions in life today. I am a junior here. I have to do what my senior tells me. We also have to work and manage home. Plus, there are long commutes. We are too much focused on making ends meet, we have no time for anything else.”

Nurse, Delhi
MOTIVATION #2

CARE

“I want to give meaningful help to individuals.”
The idea of giving care and helping others is often the central reason why many HCPs decided to enter the medical field.

Most HCPs feel rewarded when they can see progress and recovery in the patients that they work with. For some, even helping a patient to have a good death is seen as an important way of providing help and care. It is all about the positive impact that they are able to have on individuals.

Conversely, it is demotivating for HCPs when they feel that their patients do not listen to them or are indulging in self destructive behaviours that they have no power to change.

**THE REWARDS OF CARE:**

HCPs are motivated by the concept of care-giving because it provides the following outcomes:

- The tangible reward of seeing an individual/patient improve and recover
- The feeling of altruism that comes from helping other individuals to improve their lives:
  - Through education, prevention, treatment and advice
  - Especially to vulnerable or at risk demographics (e.g. poor, elderly, wayward youth, teenage mothers)
- A feeling of virtue.
DIMENSIONS OF GOOD CARE

DELIVERING TANGIBLE IMPROVEMENTS TO INDIVIDUAL LIVES

LISTENING TO THE PATIENT
Good care can come from being the person that a patient confides in, and HCPs get a lot of out two-way conversations with patients where it feels like they are building a relationship. This is particularly important to fully understand the patient on an individual and human level.

IMPROVING THE ISSUE OR DELIVERING A CURE
All HCPs want to see that they have made a tangible positive difference to the patient's health. This could be guiding them on the road to full recovery, or providing an improvement in their quality of life.

PROVIDING EMOTIONAL SUPPORT
Keeping the patient's spirits high, consoling them in times of difficulty, and ensuring that they are treated as a human throughout their experience.

SUPPORTING THE PATIENT'S FAMILY
Some HCPs see their duty of care as considering the patient's wider network, and how their loved-ones may also need supporting through their patient's illness.

EDUCATING THE PATIENT AND THEIR FAMILY
Going beyond specific diagnosis and treatment, to ensure improved wellbeing of the patient, by creating awareness of issues and risks that has come to HCP's knowledge, and to introduce preventative measures.

Health Communities Research India
“Once I have treated a patient and saved a life, at the time of discharge, the patient feels very comfortable, and the smile on the patient’s face, that makes me feel very special. Its not money or any other things, not position or other things, it is the gratitude by the patient – their thank you. Nothing can beat that.”

Cardiologist, Chennai
MOTIVATION #3

COMMUNITY

“I want to belong and contribute to the collective.”
As well as being medical professionals, HCPs are also regular citizens who seek to belong and contribute to their local communities.

The desire to make a positive difference in the community was common across HCP types. Social glue and teamwork is an important aspect of this motivation, with HCPs looking to be invited to take part in activities that will create a sense of togetherness as well as positive local change.

When they engage in community building activities, they are not necessarily thinking as medical professionals, but in other social roles; whether as parents, friends, teachers or neighbours.
COMMUNITY
PARTICIPATION HAPPENS AS BOTH AS MEDICAL PROFESSIONALS AND REGULAR CITIZENS

HCPs can play two roles in the community:

• **AS HEALTHCARE PROFESSIONALS**
  If there is a healthcare angle, they can step forward as to help develop healthcare guidelines and solutions, while also serving as educators and trainers of other volunteers.

• **AS REGULAR CITIZENS**
  If there is no healthcare angle, they participate as a regular citizen to execute ideas developed by others, their status as HCPs not giving them additional influence or deference over others. In these moments they are thinking in other social roles; whether as parents, friends, teachers or neighbours.

Both roles are fulfilling, but it gives them an extra buzz to be able to use their healthcare skills.

THE REWARDS OF COMMUNITY ACTION:

• Teamwork
• Relationship-building and social cohesion
• Social recognition
• Tangible improvement to their community
• The feeling of investing in a better future and being part of something meaningful

At present, many contribute as regular citizens, so there is also an opportunity to connect this activity to their skills and interests as HCPs.

Health Communities Research India
“I am a Rotarian for the last 40 years. Rotary is in a very big way involved with polio eradication... I was busy in setting up my practice & busy seeing patients and managing them.... Even then I volunteered for Rotary as I always wanted to do community service.”

Paediatrician, Mumbai
MOTIVATION #4

DUTY

“I want to fulfil my role in society and set a good example.”
DUTY

DEMONSTRATING THE RIGHT KNOWLEDGE, BEHAVIOUR AND VALUES TO FULFIL THEIR POSITION AS A ROLE MODEL

Duty-driven HCPs were often attracted to their professions due to the reputation of healthcare as a respectable career path and its status as a vital pillar of society.

Crucially, their sense of duty extends beyond the delivery of individual care to embrace the responsibility of being a role model within the wider community.

They are conscious of how others see them and are serious about setting an example not just through good medical practice, but by living the values and behaviours that are seen as fitting of a healthcare professional.

As a consequence, they have an innate sense of their own authority and potential influence. But as this understanding is also based on respect for traditional hierarchies, societal structures and communal practices, they are not necessarily egocentric or outspoken characters.

On the contrary, when it comes to overcoming a challenge, they are often humble and don’t automatically see it as their place to speak out or create disruption.

THE DESIRES OF THE DUTY-DRIVEN:

• Being a “good” guardian of their patients
• Social respectability
• Fulfilling their role as a doctor to promote awareness of health issues
• Contributing to shared medical knowledge
• Promoting harmony and balance
• Keeping up to date on medical knowledge and news

Health Communities Research India
DUTY
OPERATING WITH A MINDSET THAT IS CONVENTIONAL, HARMONIOUS AND DEDICATED

<table>
<thead>
<tr>
<th>RELIABLE AND CONSCIENTIOUS</th>
<th>CONSERVATIVE AND CONVENTIONAL</th>
<th>RESPECTFUL OF PEERS AND INSTITUTIONS</th>
<th>SERVICE ORIENTATED</th>
<th>UNCOMFORTABLE WITH CONFLICT</th>
</tr>
</thead>
<tbody>
<tr>
<td>They have a high sense of their duty of care as a health professional – and reliability and working hard are a key part of this.</td>
<td>They adhere to established medical norms and practices. They have a strong sense of professionalism that tends to centre around notions of tradition, integrity and commitment.</td>
<td>While duty-driven HCPs may see areas of improvement in health systems, they are overall respectful of their peers and the protocols in place. They look to official institutions for guidance.</td>
<td>The idea of acting (and being seen to act) for the wider good is a principle that guides them in their professional practice. Taking on the role of guide and mentor for patients and the wider community is therefore appealing.</td>
<td>On the whole, they prefer harmonious engagements. Conflict is un-welcome for them and they would prefer to achieve change through supportive and collaborative action.</td>
</tr>
</tbody>
</table>
“Every Sunday I go to the poorer communities and hold counselling sessions for children as well as women. I am also a part of CSR activities and workshops held by different organizations. Building awareness through workshops and counselling patients by giving them advice and company, are things that are most relevant for a doctor. Our way of giving back to society is through educating them and treating them”

Pulmonologist, Delhi
MOTIVATION #5

GROWTH

“I want to be leading conversations”
GROWTH

HCPS WITH A GROWTH ORIENTATION ARE EXCITED BY OPPORTUNITIES TO ADVANCE THEIR SPECIALISM AND THEIR CAREERS

Growth-driven HCPs are often found in more senior, specialist or prestigious positions.

Like many HCPs, their core desire is to help others, but they also have a strong career and growth orientation and are energetic about advancing their own individual prospects.

They are very confident in their own abilities and active in the wider medical community. Whether it's through teaching, training, writing for journals, or lobbying and advocacy, they feel it is important for them to have a voice.

However, the impact of action on their career is always in the back of their mind.

They are a small portion of HCPs, and most likely to be specialists, but some more motivated HCPs may adopt this mindset in other roles.

THE DESIRES OF THE GROWTH-DRIVEN:

- Professional advancement and status
- Intellectual challenge and problem-solving
- Being in the limelight, and seen as a source of inspiration for other doctors (flattering their professional ego)
- Know they have done all they can to help their patients/society
- The promise of personal growth
GROWTH
THEY FEEL OBLIGED TO USE THEIR STATUS AND EXPERTISE FOR THE GREATER GOOD, AND TO BE SEEN AS THE ONES MAKING A DIFFERENCE

<table>
<thead>
<tr>
<th>AMBITIOUS AND DETERMINED</th>
<th>EAGER WITH A CHALLENGE</th>
<th>READY TO LEAD</th>
<th>BIG-PICTURE ORIENTATED</th>
<th>OCCASSIONALLY EGOCENTRIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>They have their eyes on a bigger prize.</td>
<td>Problem-solving is not a daunting task for Growth-orientated HCPs.</td>
<td>They are naturally confident in their own abilities, and feel it is only right to use their gifts to be vocal on the issues that matter.</td>
<td>They tend to have a better awareness of the wider situation in their country — both current and future.</td>
<td>They take pride in their achievements and often consider themselves superior in their knowledge and skills.</td>
</tr>
<tr>
<td>They are always looking for ways to enhance their career and opportunities for personal and professional growth.</td>
<td>Many enjoy embracing a new challenge and get a buzz from finding solutions.</td>
<td>They seek power and authority and want to be able to influence the wider medical community.</td>
<td>This relates to health issues, but also to the politics of the medical world, and how that links to wider societal systems and government.</td>
<td>They want to be viewed as pioneers in their profession, and measure success by these individual achievements.</td>
</tr>
</tbody>
</table>

Health Communities Research India
“I was the editor of the Indian Heart Journal which is the main journal for cardiology in South Asia. I was also the chairman of the National Intervention Council and the secretary of the Cardiology Society of Delhi. My thought is that if you are a part of bigger things in society, then you are able to impact a lot more people than just your patients... One of the main motivators for me is that by doing all this, there is a lot of possibility of changing the world around you.”

Cardiologist, Delhi
### IMPLICATIONS FOR ACTION ON AIR POLLUTION

These motivations reveal potential drivers and barriers for acting on public health issues:

<table>
<thead>
<tr>
<th>SECURITY</th>
<th>CARE</th>
<th>COMMUNITY</th>
<th>DUTY</th>
<th>GROWTH</th>
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<td>“I want to get through the day unscathed.”</td>
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**HCP considerations for acting on public health issues**

- Can I make time and headspace for this issue?
- Am I too junior to act?
- Does it fit with the official rules and guidelines?
- How will my action enhance the lives of my patients in a meaningful way?
- How will my action make tangible, positive changes within my community?
- Does acting on this issue help fulfil my duties as a health professional?
- Is acting on this issue a good use for my skills and status?
- Will my efforts be rewarded with high status recognition?
- Does acting on this issue create any risks to my reputation?

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Health Communities Research India
PART 3

INDIAN HEALTH CULTURE
## INDIAN HEALTH CULTURE AT A GLANCE

### A health system that excels for some, but is basic for most

There is a culture of excellence in specialist roles/centres but many in the population still live without basic healthcare measures.

### A dual burden of infectious and chronic disease

HCPs are often fighting to control infectious disease, while conditions such as diabetes, hypertension and cardiovascular disease are also rising.

### Strong hierarchy between HCP roles

GPs and Specialists enjoy exalted status within Indian society, while nurses, pharmacists, community workers and midwives will often defer to their authority.

### A strong duty to help others with their skills

HCPs are conscious of their fortunate position and the struggles faced by others in society. This creates a strong imperative to use their skills for charitable purposes.

### Cultural and government issues undermine action

Oriental fatalism, the rise of fake news, and persistent government corruption all work to undermine wider systemic improvements.

| Results in GPs and Specialists having **HIGH** sense of agency |
| Other roles have **LOWER** agency |

| **65%** Indian HCPs have taken action on a public health issue in the past |
HCP’s in India feel they are fighting a battle on multiple fronts; dealing with the diseases of both a developed and fast developing nation

TWO MAIN FRONTS TO THE HEALTHCARE BATTLE:

DEVELOPING WORLD INFECTIOUS DISEASED

Infectious diseases still persist as a major health issue in spite of several national programs to control them.

HCPs mention a constant battling with communicable diseases such as TB, bacterial infections, gastro enteritis, dengue, typhoid, malaria.

GROWING “LIFESTYLE” BASED ILLNESS

At the same time, there has been increasing prevalence of non communicable diseases as a result of urbanization & lifestyle changes. In particular, a growing incidence of diabetes, hypertension, cardiac/coronary ailments

This is particularly relevant to the young, urban population. Thus HCPs feel that there is an impending health crisis with this group.

Health Communities Research Qualitative Debrief

Q2a. 6 issues that apply from this list (including any that you stated in Q1 if relevant)
Socio-economic disparities remain a problem, and the most deprived populations often lack basic healthcare measures.

Wealthy Indian patients have some excellent health resources at their disposal. However, huge segments of the patient population are still unable to access basic health resources and consequently suffer from a range of issue that increase the burden of disease and reduce living standards.

For example:

- Sanitation and hygiene: A huge section of the population still has limited access to clean water supply, proper sanitation and basic hygiene & health facilities.
- Adulterated food
- Improper waste management
- Poverty, illiteracy and low education

“In India we have not done any civil society reformation. The benefits of development are enjoyed only by the upper strata. The urban middle class & the downtrodden especially are suffering from not getting access to many facilities. We find huge difference in access to health care, good drinking water to a hygienic environment as well as basic sanitation. There is a huge difference between the rich and poor which is widening day by day.”

GP, Chennai
Moreover, a long-term strategy for health has never been a priority for the government, so HCPs must also contend with a fragile public health system.

HISTORICAL UNDER-INVESTMENT IN PUBLIC HEALTH

There has been insufficient investment in public health facilities – the health care sector seen to be low priority for successive governments. The focus has always been on economic growth measured in terms of GDP, rather than on human or social development index.

A SYSTEM UNDER STRAIN FROM POPULATION GROWTH

Over population also puts greater strain on limited resources—leading to an ever-widening gap between demand & supply. Additionally, high density of population makes it a greater challenge to control infectious diseases.

“Covid has exposed our faulty developmental model with poor health systems. Government has been polishing the shoes & making it shine, but Covid has exposed the shoe to actually be a torn slipper”

GP, Chennai
HEALTH CULTURES: INDIA

These pressures drive a culture of fast-paced and short-term treatment, where there is little room for preventative care.

PATIENTS SEEKING QUICK, CHEAP FIXES

HCPs feel that their patients will often wait until matters are urgent before seeking healthcare, and that as soon as their symptoms disappear they will stop taking any medicine or applying curative measures.

This partly caused and exacerbated by poverty and low education, but also relates back to a lack of preventative healthcare culture.

WHILE HCPS ARE INCENTIVISED TO PRIORITISE THE SHORT TERM

Speed of diagnosis & recovery are important parameters of HCP evaluation; hence, they are inclined to prioritize short term solutions versus a long term, more sustainable plan of action.

There are few structural incentives for them to focus on holistic treatments and advice on lifestyle factors in their patient’s condition.

“The public is very careless about health... they just want quick medicines so that their problems are cleared in 2-3 days.”

Pharmacist, Mumbai
HEALTH CULTURES: INDIA

There is a clear status hierarchy between different healthcare roles, with specialists and GPs at the top

“We usually work under the gynaecologists, we take care of the patients and report to the doctor. If the medicines prescribed is not suiting the patient or the patient is not getting well, we call the doctor immediately and follow whatever instructions he gives us.”
Midwife, Delhi

<table>
<thead>
<tr>
<th>HIGH STATUS</th>
<th>GPs &amp; Specialists</th>
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<tbody>
<tr>
<td>Perceived as one of the most prestigious professions to belong to</td>
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<tr>
<td>Enjoys exalted – sometimes God-like – status in India</td>
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<tr>
<td>Specialists are often working at the cutting end of their field (both in India and internationally)</td>
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<td>Commands respect and awe</td>
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<tr>
<th>LOWER STATUS</th>
<th>Nurses, Pharmacists, Midwives and Health Workers</th>
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<tr>
<td>Has medical knowledge but must defer to doctors for true expertise</td>
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<tr>
<td>More comfortable following order and protocols</td>
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<tr>
<td>Refers to authority before taking action or making independent decisions</td>
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<tr>
<td>Implicit understanding that they hold a “lesser” status</td>
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Indian HCPs feel they have influence in multiple spaces, with high status roles feeling a greater sense of empowerment.

While the feeling of being able to influence was generally quite high among Indian HCPs, two groups felt especially empowered:

**GPS AND SPECIALISTS**
Overall, they describe themselves as more influential. This was especially the case for influencing government, hospitals and the medical community.

**MIDWIVES**
Consistently over-indexed vs other roles, viewing themselves as the most influential groups of HCPs in general.
HEALTH CULTURES: INDIA

Most have been inspired to act on a public health issue; most often by advising patients, sharing knowledge or undertaking charity work

The most mentioned forms of action were:

**ADVISING PATIENTS / PATIENT GROUPS (79%)**
This is the type of action that comes most naturally to HCPs – they have regular access to patients, and most believe themselves to be in an position of authority.

**SHARING KNOWLEDGE AND RESEARCH (72%)**
There is an active desire and pressing need to build medical knowledge and understanding among medical and citizen communities.

**TAKING PART IN NGO OR CHARITY INITIATIVES (52%)**
The levels of deprivation in the Indian population means that there is a heightened expectation/desire to get involved in charity work to help those communities (especially among GPs and Specialists.)

“... government doctors like us, we already do a lot of voluntary work. Every Sunday I go to the poorer communities and hold counselling sessions for children as well as women. I am also a part of CSR activities and workshops held by different organizations. Building awareness through workshops and counselling patients by giving them advice and company, are things that are most relevant for a doctor. Our way of giving back to society is through educating them and treating them”

Pulmonologist, Delhi

40% of the RESPIRATORY specialists and 49% CARDIOLOGISTS stated YES compared to the rest of HCPs, 56%+ (MIDWIVES & PEADS highest at 80%)

Q7a. Have you ever been inspired to take action on a public health issue? Q7b. What was the form of action that you undertook?
ALL ROLES FEEL A DUTY TO HELP

The most popular reasons across all HCP roles for taking action were:

- I felt responsible
- It helped make a positive difference to people/my community

This is likely due to overall HCP awareness of the challenges associated with deprivation and health across India.

GPS AND SPECIALISTS

They were more likely than other groups to be motivated by growth and learning opportunities such as:

- It felt like a good use of my skills
- It provided opportunities to take leadership
- I could play a role in advancing the medical understanding of an issue.

NURSES, PHARMACISTS, MIDWIVES AND HEALTH WORKERS

These roles were generally more likely to take action on a public health issue than other roles. While some are motivated by the factors outlined above, they are more likely to be motivated purely by a feeling of responsibility and making a difference in communities. They also tend to wait for permission from authorities before acting.
Providing health education is one of the key objectives of HCP action, and they feel a duty to inform the population

LOW HEALTH KNOWLEDGE IS A MAJOR BARRIER TO PROGRESS

Ignorance and poor education as a result of poverty are seen by HCPs as a major barrier to improved public health. They can lead to a limited understanding of the importance of preventative action or the gravity of the patients’ health issues.

HCP’s find that superstitions, ignorance, preference for quacks also interfere with the treatment process and often reduce or reverse the impact of interventions.

THEREFORE HCPs FEEL A DUTY TO SHARE THEIR EDUCATION

HCPs realise that their educated status puts them in a position of privilege, and are keen to use this to address the health knowledge deficit within the population. Moreover, their regular contact with patients makes it a natural and easy role to fulfil.

However, the perception of patients as ignorant can sometimes cause HCPs to adopt a condescending way of communicating with them.

“People in the rural areas are completely bogged down with superstition.... So I am involved in a drive in Tamil Nadu taking scientific principles to the rural communities, especially the youth. So that they know science and are not closed by things such as caste, creed etc.”

GP, Chennai
HEALTH CULTURES: INDIA

Ingrained oriental fatalism means that patients can be reluctant to change their habits or seek advice

HCPs find that many patients still hold a high belief in destiny and God’s will – they think that what has to happen has to happen.

This leads to two kinds of behaviour:

- Health risks are downplayed due to the belief that one can reduce consequences by having faith in God.
- There is no proactive attempt to manage what is seen as being out of their control.

This can also result in a tendency among patients to be change-averse.

Many patients prefer to maintain status quo and will not seek new solutions or information unless faced by a tangible disruption to their lives.

"If you look at western philosophy it is more evidence based which means that people look to shift to new ways if they feel that it is possible to change things. But in the Oriental philosophy they have this thing called destiny that whatever is destined will happen and it does not matter as to what you do. So preventive measures are not given much thought."

Cardiologist, Delhi

Health Communities Research Qualitative Debrief
HEALTH CULTURES: INDIA

And HCPs often have to debunk fake news before they can teach the facts (and sometimes use dubious news sources themselves)

INFORMATION ON HEALTH IS BECOMING INCREASINGLY ACCESSIBLE

The increased availability of information on the internet and via social media (especially Google) is helping the patient community to become more empowered and self reliant.

BUT WHAT HAS THE POTENTIAL FOR EMPOWERMENT CAN ALSO MISLEADS

Easy access to information is seen as a double-edged sword by the medical community.

While patients are becoming more aware and in some ways benefitting from the democratisation of information, they are also exposed to a host of half-baked information and fake news.

Social media, especially WhatsApp, has contributed to creating and perpetuating myths and misconceptions about various health issues leading to practices such as self-prescription and ignoring HCP’s suggestions.

HCPS NEED TO DISINFORM AS MUCH AS INFORM

As a consequence, HCPs find themselves having to disinform patients of their erroneous views. Moreover, the HCP community itself using some of the same sources as its patients, suggesting that some among them might also be vulnerable to misinformation.

HCP’s TOP 3 TRUSTED INFORMATION SOURCES:

- Indian Medical Association: 58%
- WHO: 52%
- Google: 26%

Higher for nurses, midwives and pharmacists

- A significant minority of nurses, health workers, pharmacists and midwives also regularly rely on WhatsApp for information (23%).
- Specialists and GPs are much more likely to favour journals and health organisations over social media and Google, where their interest is minimal.
“Patients used to blindly listen to me and follow what I told them to do. But now they come armed with information from Google. So I have to be not just careful about what I tell them, I also need to spend time telling them that Google is not always right: Social media is not always accurate... I call it as WhatsApp University. Whatever is there in WhatsApp University is not necessarily correct”

Pediatrician, Mumbai
Moreover, a lack of trust in the government leads HCPs to feel cynical about creating widespread change in public health.

At the same time, they also observe:

- A lack of accountability at an institutional and civic level in terms of both establishing & implementing rules & regulations.
- Systemic corruption regarding monitoring & regulating environmental issues. E.g. bribery for getting clean licenses for factories/cars.

Therefore the medical community feel doubtful that their efforts will lead to meaningful change.

“In India, money can buy anything. Factories can start even with high pollution rates. They just bribe the right people- you give money, you can buy any department, any MLA...Government today is only interested in making money. Even judges can be bought today, Green Tribunals can be bought. So industrialists are taking advantage of that and setting up factories that are polluting more”

Pulmonologist, Chennai
PART 4

INDIAN HCP PERCEPTIONS OF AIR POLLUTION
**INDIAN PERCEPTIONS OF AIR POLLUTION AT A GLANCE**

36% Indian HCPs consider air pollution to be a public health priority, despite high recognition for the issue.

<table>
<thead>
<tr>
<th>Reason</th>
<th>Details</th>
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<tbody>
<tr>
<td><strong>Being overwhelmed by more immediate problems</strong></td>
<td>Indian HCPs are more focused on implementing basic healthcare measures, dealing with both chronic and infectious diseases, and managing a system that is under strain from population growth.</td>
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<tr>
<td><strong>Low awareness and evidence of health impacts</strong></td>
<td>Many associate air pollution with respiratory discomfort, but do not always recognise the more severe long term effects. Doctors who seek further information find that it is lacking.</td>
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<tr>
<td><strong>Lack of practical solutions for an Indian context</strong></td>
<td>HCPs feel that many solutions are designed for a developed world context, and that it is hard to give patients advice that they are able to follow in practice.</td>
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<tr>
<td><strong>An environmental problem, for higher powers to solve</strong></td>
<td>HCPs don’t see it as their role to intervene in big systemic challenges. The government needs to tackle it as part of other issues, however, they do not trust it to handle the challenge with effectiveness and integrity.</td>
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Results in a **LOWER** sense of issue motivation, but higher level of action than other countries:

71% have taken some form of action

GPs and specialists typically feel greater agency to act, although all Indian HCPs feel that they can influence patients.
Air pollution in India is a recognised issue.

It has come to the forefront because of its visibility in urban environments and growing respiratory illness among patients.

Earlier coughs, colds & allergies were seen to be largely seasonal in nature.

But today these have become an almost constant feature of Indian urban life and HCPs observe that they are even affecting children, non-smokers and people without hereditary disposition towards lung issues.

Air pollution is seen to affect entire communities – especially those that have higher levels of exposure to poor quality air (e.g. live near a factory or the highway).

55% of the HCPs have personally seen significant health related consequences as a result of air pollution on their patients health.

“As the population increases, pollution increases, so I feel the air pollution will be disastrous in the future for the metro cities. It causes asthma and eosinophilia increases; it leads to many problems in the lungs.”

Pharmacist, Delhi
Indian HCPs relate air pollution back to numerous sources stemming from rapid urbanisation and industrialisation

HCPs see air pollution as a symptom of wider environmental deterioration. While traffic is often mentioned as a key source, they also tend to view the problem with a wider lens, considering how it is joined to multiple elements of urban life.

They highlighted the following sources as contributing to air pollution:

- Crowded cities with overpopulation and cramped living conditions
- Poor sanitation & waste management
- Lack of greenery
- Excessive vehicular traffic
- Increasing construction activities
- Emission of noxious fumes from industry

“The urban population is exposed to more pollution with the increase in automobiles, greater use of any diesel or petrol fuel. Metros like Delhi, Bombay, Chennai and Bangalore are more polluted because of the number of people living per square kilometer is much more and the number of vehicles in also much more and the amount of time you spend on the road rather than inside the house is also much more. People who are working in factories are exposed to pollution as are construction workers.”

Cardiologist, Chennai
Yet despite acknowledging the problems of air pollution, many HCPs do not regard it as a priority health issue.

There are many tangible signals of poor air quality in India such as visible smogs that lead to everyday inconvenience and respiratory irritation.

Yet despite the fact that 65% Indian HCPs are inspired to take action on public health issues, only 34% believe that air pollution is a priority public health issue, suggesting that they are likely to deprioritise it when acting on public health more generally.
“Air pollution is seen as a big issue and has come into our notice only because of the visible smoke on the roads, growing lung diseases and on a personal level, my flight delays in Delhi. Otherwise nobody would have bothered about it.”

GP, Chennai
Other issues are viewed as both more urgent and more important

“If your patient is staying in a polluted area or is working in a factory... you then tell them that pollution will harm your body and you will have physiological issues because of poor breathing. I also tell a lot of smokers that you will get tired and won’t be able to work because of constant inhalation of bad smoke. But other than that we nurses have many other health issues to focus on, so we can’t explain the effects of air pollution all the time.”
Nurse, Mumbai
PERCEPTIONS OF AIR POLLUTION: INDIA

When HCPs India act on air pollution, their focus is usually on advising patients rather than taking up other roles

“So, as a doctor I think giving medical treatment, giving them advice on lifestyle modification and spreading awareness is the only role a doctor has. I am willing to do research, if I get sufficient funds. But there is no point in doing just academic research unless it becomes a policy and is implemented.”

Cardiologist, Chennai
Perceptions of Air Pollution: India

Ability to act vs action taken

Q11. Have you ever taken any action to tackle air pollution or to improve air quality?

- Advised patient groups: 78%
- Researched or shared knowledge with others: 75%
- Sought to influence policies and practices of where I work: 63%
- Sought to influence policies of government/regulatory/commercial organisations: 49%
- Supported an NGO or Charity initiative: 63%

Health Communities Research Qualitative Debrief
HCPs typically target advice at patients whose condition is clearly linked to air pollution, providing basic, practical tips to limit exposure.

For the majority of (time-presssed) HCPs advice is basic

- They typically mentioned that they will try to provide patients with simple, general health tips to reduce exposure to air pollution.
- Most of these are common sense, regular remedies – such as going for walks in a park, doing yoga, not cooking on wood fire/coal, reduced smoking.

For a minority of HCPs with higher engagement and status, the advice is more tailored

- They will undertake a more detailed assessment of the patient history and prescribe a more comprehensive treatment strategy – that includes counselling on lifestyle changes, practical advice and aids to minimize exposure to air pollution.
- It could also include suggestions to wear a mask while using public transportation, investing in air purifier at home, and checking air quality index before planning daily activities.

"Air pollution leads to some breathing issues. So we tell patients to breathe in fresh air and try to be in fresh surroundings like a park.”

Midwife, Delhi
The 5 most common reasons that Indian HCPs do not take more extensive action on air pollution are:

- **Low awareness & evidence of health impacts**
- **Being overwhelmed by more immediate problems**
- **Lack of practical solutions for an Indian context**
- **It is seen as an environmental problem, for higher powers to solve**

Lead to de-prioritisation and mixed-messages in advice to patients

Impedes action in other roles, even where there is intent
PERCEPTIONS OF AIR POLLUTION: INDIA
BEING OVERWHELMED BY MORE IMMEDIATE PROBLEMS

Other issues require urgent attention
There are a host of other issues that feel more urgent than air pollution because of their grave and tangible short-term consequences. In particular, HCP’s mentioned:

- Communicable disease
- Growing incidence of non-communicable disease
- Over population and strained health system
- Implementing the basics of public health – e.g. sanitation, vaccination

Air pollution does merit action, but it can be delayed
The predominant attitude played back by HCPs is that any risk factor that is intangible, uncertain & has long term implications is not a high priority concern compared to the issues above. Air pollution falls into this category.

Lower-status HCPs have extra pressure to focus on the urgent
HCPs in lower status roles have less autonomy to deviate from immediate demands and must deliver on all the requests of their superiors before they can think about non-urgent issues.

“In my urban practice, my biggest challenge is that we are constantly facing a double epidemic. In the west, they have controlled their infectious diseases. Like TB, cholera. Here these are still rampant and we also have a huge chunk of people with diabetes and heart issues. Chennai is the diabetic capital of India. For every 10 patients, 4-5 are diabetic.”

GP, Chennai

Health Communities Research Qualitative Debrief
“Firstly, we do not have time to take on these additional responsibilities. Because our schedule is so busy, because we cannot manage to do things well if we add in extra work and get involved in all this. Then our seniors and colleagues may also say you are getting involved in too many new things”
Nurse, Delhi
While HCPs generally believe that air pollution is a health risk, there is a lack of clarity on what this really means, and a significant minority are either unsure, unaware, or unconvinced of its impact.
PERCEPTIONS OF AIR POLLUTION: INDIA
LOW EVIDENCE AND AWARENESS OF HEALTH IMPACTS

“Air pollution is when we breathe in poor air. That air enters your body, it will not feel comfortable. You will have difficulty in breathing, it can cause lung problems, there can be congestion in the lungs and that will cause problems. Asthma is increasing daily”
Pharmacist, Delhi

FOR MANY HCPS, AIR POLLUTION IS PRIMARILY ASSOCIATED WITH RESPIRATORY DISTRESS AND DISCOMFORT

• For majority of HCPs, especially lower status roles, air pollution is linked mainly to ‘breathing’ issues and lung problems
• This is on account of a direct link with breathing in noxious fumes, poisonous air and its negative consequence on the pulmonary system
• They associate it with constant coughing, sneezing, runny nose, the need to take medication.

RECOGNISED AS A THREAT BY ITS ACUTE EFFECTS

It is only the presence of tangible indicators that heighten concern with air pollution amongst many HCPs and their patients. These indicators could be in the form of:

• Discernable problems in patients – emergence of COPD issues
• Concrete proof of a health risk- high levels of exposure to visibly poor quality of air/smoke/fumes/dust, heavy smoking behaviour

AN IRRITANT, NOT A SERIOUS RISK

• For most, air pollution is seen as a factor that disrupts overall quality of life, rather than a serious threat to long term health and wellness.
PERCEPTIONS OF AIR POLLUTION: INDIA
LOW EVIDENCE AND AWARENESS OF HEALTH IMPACTS

BUT MOST GROSSLY UNDERESTIMATE ITS FULL EFFECTS

THEY ARE NOT AWARE OF THE SEVERE, LONG-TERM IMPACTS ON THE REST OF THE BODY

• It is only a minority segment of doctors who acknowledge its more severe implications on current and future health

• They link air pollution to being a contributory factor to cardiac ailments, malignancies beyond lung, compromised immunity & growth.

• These are the doctors who emphasize on the need to join the dots between air pollution & a host of critical ailments, beyond pulmonary issues.

“If I am honest with you, I have to say that most doctors even among my colleagues feel that air pollution is a problem linked with mainly the lungs. Most don’t view it as heart issue. The fact that pollution can cause heart problems which could be even more serious than a lung problem is something that very few people, including doctors, are aware of.”

Cardiologist, Delhi

“People know that the quality of air is deteriorating. They can see the impact of pollution in the environment around them. But they don’t give so much importance to it. The diseases linked with air pollution do not have an immediate effect and that is why people don’t take it seriously and are less concerned about managing it.”

Pulmonologist, Chennai
HCPs’ ability to build their knowledge of air pollution varies across different roles:

**GPS AND SPECIALISTS**

**ACTIVELY SEEK KNOWLEDGE DUE TO:**

- Awareness of initiatives launched by first world countries to deal with issues such as global warming, climate change & conservation
- Professional experience: rising incidence of cardiac/respiratory issues across life-stages leads them to seek possible causes

**BUT FIND THE EVIDENCE AND INFORMATION LACKING**

Those who have taken the initiative to find out more have encountered a vacuum of information and lack of organisation within professional networks around the issue.

- The medical community is not seen to be focusing on knowledge sharing in a focused, organized manner
- There is an absence of air pollution seminars, workshops, panel discussions
- Doctors mention inadequate focus on air pollution even in the medical curriculum – both current & past

“Doctors are doing a lot of research in medical institutions. But nobody is doing any research on air pollution because it is not a trending topic. When I studied medicine in Pondicherry, there was no chapter on air pollution”

Pulmonologist, Chennai

Health Communities Research Qualitative Debrief
“I have never come across a major study which has told you that this is the air pollution level in your city and if your child is being exposed to this air pollution level for the next 20 years, this is the damage his lung will take.”

Cardiologist, Chennai
HCPs’ ability to build their knowledge of air pollution varies across different roles:

**NURSES, MIDWIVES, COMMUNITY WORKERS & PHARMACISTS**

**RELIANCE ON PASSIVE KNOWLEDGE BUILDING**

From inputs such as:
- Personal experiences of polluted air in their surroundings, such as:
  - Vehicular fumes
  - Burning wood for cooking
  - Increased dust from construction activities
- Media: TV news as well as newspapers. But only when air pollution makes headlines
- General buzz around negative impact of passive smoking, inhalation of cigarette smoke.

But none of these sources cover the subject in depth, so understanding remains superficial.

**POOR DISSEMINATION OF OFFICIAL KNOWLEDGE**

There is also a lack of coverage of air pollution within their professional training and from the authorities they report to.

“Air pollution came into focus in Delhi where we heard in news channels that people are facing many breathing issues. We saw everyone using a mask and heard for the first time that in so many years, that the air quality had becoming alarming here. But in Mumbai the focus is not so much and maybe once people start facing similar issues like Delhi, there will be more awareness of the need to control air pollution”

Nurse, Mumbai
A SYMPTOM OF WIDER ENVIRONMENTAL DETERIORATION

Leading HCPs (both doctors & paramedics) to believe that air pollution is just one aspect of a complex developmental issue that they have little control over. Rather than being just a medical problem. There is recognition that several sources of environmental pollution are interlinked and in conjunction create health hazards.

REQUIRING MULTIPLE STAKEHOLDERS TO SOLVE

HCPs believe that other actors – government, business, scientists – need to come together to overcome the systemic issues that lead to air pollution.

ENVIRONMENTALISM SOMETIMES = ANTI DEVELOPMENT

HCP involvement is complicated by the fact that environmentalism is sometimes seen as running against the nation’s drive for greater progress and development.

“Air pollution needs to be tackled along with other factors such as over population, infrastructural issues, social inequalities & occupational problems... I would say that air pollution is not so much a scientific problem. Its role in health is peripheral. So I won’t be able to offer too much in tackling it unless the authorities undertake a planned organized effort in every sector”

Pulmonologist, Delhi
HCPS DON’T SEE IT AS THEIR ROLE TO INTERVENE IN BIG SYSTEMIC CHALLENGES

Government is seen as the most powerful actor in the challenge. Yet HCPs generally feel that they can seek to influence government and commercial organisations, but do not believe they will be as influential in these spaces as in other roles (such as research or advising patients).

THEY ALSO DON’T TRUST THE GOVERNMENT TO HANDLE IT PROPERLY

There is a general feeling that the government is either too inept, unfocused or corrupt to implement the measures that are needed.

“On my own, I can only tell people what air pollution is, but to deal with it- the government and other authorities have to make rules and implement them”

Pharmacist, Mumbai
“Everybody is saying that pollution and we have to reduce it.... I think the government is helpless and clueless in these scenarios. As a GP I am unable to tackle all these issues. It is only when the society changes and when governments work towards providing a better place for future generations, then only will the scenario change in a country like India”

GP, Chennai
PERCEPTIONS OF AIR POLLUTION: INDIA
LACK OF PRACTICAL SOLUTIONS FOR INDIAN CONTEXT

INDIVIDUAL ACTION FEELS IMPRACTICAL

HCPs often feel that they are forced to offer patients solutions that are beyond their control:

E.g. no burning of garbage, living away from polluted areas, breathing in fresh clean air

CONVENTIONAL FIRST WORLD SOLUTIONS ARE NOT FEASIBLE IN INDIAN CONTEXT

Air pollution solutions that have been trialled in developed contexts often feel dissonant with India’s socio cultural & infrastructural reality.

E.g. replacing cars with bicycles jars with notions of progress & success & are also risky on Indian roads

Plus, the absence of a well established, clean public transport system makes it difficult to promote as the better option

“The solutions I give patients are not always practical. I tell them to avoid dust and road pollution. But they have to commute to work daily. So how can they stop commuting? I also tell them to wear masks but sometimes when you are working in a hot and humid environment, it is not very comfortable wearing a mask and working”

GP, Chennai
HCPs believe air pollution lacks awareness, but they can use their influence with patients to start raising its profile

78% of all HCPs surveyed believe that they have **significant influence in Advising patients/patient groups about air pollution.**

The majority of HCPs agree that awareness of the dangers of air pollution is too low – and one potential role they could play is helping to change this by advising their patients.

> “Nobody is doing anything to create awareness about air pollution. It is very difficult for us to do anything, if people are not aware.”
> 
> **Pharmacist, Delhi**

> “If the Rotary or the government initiates an air pollution awareness campaign, I will be willing to get involved. Especially as I can educate consumers on how to prevent lung damage in children.”
> 
> **Pediatrician, Mumbai**

> “As a doctor I can create awareness among the public and I meet a lot of patients – at both government & private hospitals. So I can create awareness among them, I can also hold one or two press meets. I can also arrange meetings with colleagues and other doctors where we can discuss the issue.”
> 
> **GP Chennai**
And a smaller, more ambitious cohort are keen to enhance the medical community’s understanding and ability to act around air pollution.

“There right now is no common platform where different sectors can come together and discuss about what is happening or not happening in the sphere of air pollution... it would give an opportunity for policy makers, bureaucrats, doctors, social activists- all who may have conflicting ideas or diverse set of opinions to come together to think on actual practical solutions that can be rolled out and implemented.”

GP, Chennai
PART 5

SUMMARY OF MOTIVATORS AND BARRIERS TO HCP ACTION ON AIR POLLUTION
SUMMARY OF HCP MOTIVATORS AND BARRIERS TO ACTION ON AIR POLLUTION

Our engagements across our five countries have revealed several common motivators and barriers to acting on air pollution:

**BARRIERS**

**Competing stressors**
“My headspace is occupied with higher priority issues.”
“I’m too junior to make an impact.”

**Maintaining their standing**
“Getting action wrong could hurt my reputation.”
“It’s not in my official training, guidelines or duties.”

**Overcoming helplessness**
“It’s a fight to get individuals to care.”
“There is nothing that my patients can do.”
“The government won’t listen or act.”

**MOTIVATORS**

**(Mis)understanding the problem**
“This is a problem for other experts.”
“There isn’t enough evidence of the health impacts.”

**Lack of inspiration on action they could take**
“It’s unclear what kind of action I could take / role I could play.”
“There is no high status leadership on the issue.”

**Giving something tangible**
“I want action to enhance the lives of my patients / community in a meaningful and tangible way.”

**Feeling part of something**
“I want to work with and contribute towards my community.”

**Living out core HCP values and identity**
“I want my action to help fulfil my duties as a health professional.”
“I want to make good use of my unique skills.”

**Gaining recognition**
“I want my action to be rewarded with high status recognition.”
THANK YOU
## APPENDIX

### SAMPLE & METHODOLOGY

#### QUAL

**1hr in-depth interviews**

<table>
<thead>
<tr>
<th>HCP Specialism</th>
<th>No. India</th>
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<tbody>
<tr>
<td>Generalist (GPs or Family Practice doctors)</td>
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<td>Specialists: Lung / Respiratory</td>
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<tr>
<td>Specialists: Paediatricians</td>
<td>2</td>
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<tr>
<td>Specialists: Cardiologists</td>
<td>2</td>
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<tr>
<td>Midwives</td>
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<td>Pharmacists</td>
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#### QUANT

**15 minute survey**

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<td>Specialists: Cardiologists</td>
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