HEALTH COMMUNITIES RESEARCH

BANGLADESH FOCUS

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INTRODUCTION & CONTENTS

OBJECTIVES OF THIS REPORT

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

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

- Understand how key health communities in Bangladesh 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 Bangladeshi healthcare professionals.*

CONTENTS

This report is structured in 5 parts:

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

PART 1 KEY TAKEOUTS AND STRATEGIC RECOMMENDATIONS

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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**.



LOW AGENCY

We found that Bangladeshi HCPs sit between 'disempowered indifference' and 'frustrated intentions'

HCPs think that air pollution is a matter that should be tackled, but lack the means to do so.

The air pollution issue requires greater urgency, and for action to be seamless and accessible.



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	CARE	COMMUNITY	DUTY	GROWTH
"I want to get through the day unscathed."	"I want to give meaningful help to individuals"	"I want to belong and to contribute to the collective"	"I want to fulfil my role and act as a role model for others."	"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 u Does acting on this issue creat	2

Bangladeshi HCPs feel inspired to act on health issues, but a struggling system holds them back

91% Bangladeshi HCPs surveyed have taken action on a public health issue in the past.

Most commonly to advise patients – other roles are perceived as more challenging. A system that is struggling with severe shortages and many pressures

Overpopulation and low-financing have led to shortages of HCP personnel and infrastructure flaws – in turn creating intense patient demand and high HCP workload. Widespread poverty and low patient education remain challenging

Bangladesh has made progress in educating the population, but many still live in poverty and lack basic health care measures and knowledge. High costs and malpractice drive patients away from doctors

This creates a culture where patients are averse to seeking treatment and instead look to retail pharmacists, religious shamans and sometimes fraud doctors for a quick fix. An HCP culture that venerates high education

GPs and Specialists often working in dual roles to both treat and teach; the latter seen as a duty and also a route to greater status and legitimacy. Higheducated roles and professorships are applauded. Frustration in government mis-

management of the system

Many HCPs believe that the government needs to improve monitoring systems and financing, and put an end to mismanagement, corruption for the health service to improve.

Bangladeshi HCP's regard air pollution as an urgent public health issue.

88% of HCPs have

personally seen significant health related consequences as a result of air pollution **on their patients health**

64% have taken action in the form of advising patients.

BANGLADESHI HCPS' SIGNIFICANT URGENT TOP 10 ISSUES (PROMPTED)



But when it comes to wider action, they deprioritise it vs other issues, and do not see it as their responsibility to solve

Yet only **10%** Bangladeshi HCPs describe themselves as actively involved in campaigns or activities to help (rising to 36% among respiratory specialists)

And **35%** Bangladeshi HCPs have not yet taken any action to tackle air pollution or improve air quality.

They mains reasons HCPs deprioritise it are:

A focus on more immediate problems

HCPs believe there are more critical health issues – for example poverty, malnutrition, infectious disease.

At the same time, they are so busy and under-resourced within an over-burdened system that they only focus on urgent issues. Incomplete evidence of the link to serious health impacts

Doctors understand what air pollution is but regard it as one causal factor among many when it comes to serious health impacts. Other roles have an even more superficial knowledge of its links to health.

All HCPs view air pollution as a problem that will impact the health of the next generation more.

A problem for government and higher powers to solve

HCPs associate air pollution with issues such as water pollution, soil contamination etc. And they feel that as an environmental problem it's beyond their expertise to address.

Ultimately, they believe that the government needs to lead the fight against air pollution if it is to be successfully eliminated. There are three roles with high potential for Bangladeshi HCPs to take greater action

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

The medical culture's veneration for knowledge sharing is particularly relevant here – academic institutions and existing knowledge-sharing habits could be good vehicles for encouraging engagement with air pollution. The chart below shows how Bangladeshi 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.



■ACTION TAKEN ■ABILITY TO ACT

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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)

10

97%

95%

THIS LEADS TO A STRATEGIC FOCUS OF: CREATE OWNERSHIP AND EASE OF ACTION

To unlock HCP and Supporting Influencing charities & where they sharing sharing

PRIORITY ACTION AREAS

EMBED INTO EXISTING HEALTH SYSTEMS/NGO INITIATIVES

2. FACILITATE AND CELEBRATE ROLE MODELS

3. GENERATE AND DRIVE EVIDENCE

KEY AREAS FOR ACTING ON STRATEGIC FOCUS

STRATEGICCreate ownership and ease of action to increase HCP action in sharing knowledge, supporting NGOsFOCUSand charities and influencing where they work

PRIORITY ACTION AREAS	Embed into existing health systems (and NGO initiatives)	Facilitate and celebrate role models	Generate and drive evidence
WHO Which members of the HCP population should be targeted?	This action area primarily helps low status HCPs (e.g. community health workers, nurses, pharmacists) who have broad access to patients but find it difficult to act in roles that are not already part of their job.	HCPs in high status roles (e.g. specialist consultants and GPs) who will relish the opportunity for professional and academic growth.For lower status HCPs, revealing how small actions can make a difference can also be powerful.	All HCPs, but particularly specialists (e.g. specialist consultants, but also midwives) who are seeking better information about the types of patients that they treat.
HOW Illustrative tactics	 Ensure that AP is recognised on the training curriculum and within standard healthcare practices. Distribute guidance on clean air management and practices to local clinics and hospitals. 	 Share stories of times when an HCP has taken action on AP and made a tangible difference to a community/patient's health. Do this in collaboration with academic institutes and professional organisations that are seen as a beacon for recognition within the HCP world. 	 Commission and share studies that look at the impact on AP on the health of specific demographics / illnesses (to use with specialists). Involve the HCP population in developing studies/improving their understanding of AP at a local level. Ensure all evidence can be traced back to a Bangladeshi context.

SEQUENCING OF FUTURE ACTION AREAS



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.





HORIZON 2 Deepening emotional engagement and increasing ease of action





HORIZON 3

Scaling action and engagement to the wider HCP community

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PART 2 PERSONAL-PROFESSIONAL MOTIVATIONS

WE FOUND 5 PERSONAL-PROFESSIONAL MOTIVATIONS THAT SPUR HCPS TO ACT:



Summarising the motivation...

SECURITY	CARE	COMMUNITY	DUTY	GROWTH
"I want to get through the day unscathed."	"I want to give meaningful help to individuals"	"I want to belong and to contribute to the collective"	"I want to fulfil my role and act as a role model for others."	"I want to be leading challenges."
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 . 	 Seeing an individual/patient improve and recover Helping others to improve their lives. Relationship building with individuals. A feeling of altruism. 	 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. 	 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. 	 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

These are motivation that apply across the international healthcare community, although they are expressed in different ways in different cultures.

MACRO / EXTERNAL FOCUS Orientated towards how others view them

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MOTIVATION #1 SECURITY

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"I want to make it through the day unscathed."

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SECURITY DEALING WITH THE STRESSES AND PRESSURE OF THE JOB

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

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SECURITY ORIENTATED HCPS PRIORITISE THE HERE-AND-NOW AND STICK TO DIRECTION AND GUIDELINES FROM THOSE WITH AUTHORITY

RESTRICTIVE	REALIST, NOT	NON-CONFRONTATIONAL	DEFERENTIAL TO AUTHORITY AND
WORLD VIEW	IDEALIST	AND RISK AVERSE	PROCESSES
Life is about coping	They are hardworking	Security-driven HCPs prefer to	They are either consciously or
with multiple realities	but also aware that	go with the flow.	subconsciously aware of their juniority –
and not losing control.	they have limited	They do not wish to jeopardize	either in terms of inexperience, or because
This leads to an	resources & tools to	their hard earned position, and	they occupy a less "expert" role. Therefore,
inability to see a	work with.	are therefore are unwilling to	they look to seniors and official protocols for
bigger picture beyond	Hence, recognize that	take risks or make themselves	guidance.
daily life and roles.	their efforts can only go so far.	stand out.	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.



"Sometimes I cannot give my child enough time because of my tight schedule as I manage my government job and my chamber at the same time. My child can feel to be deprived." GP, Dhaka

MOTIVATION #2

"I want to give meaningful help to individuals."



CARE THE CENTRAL MOTIVATION THAT LINKS ALL HCPS

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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.



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"I had a fascination about the dress code of nurse in my childhood. It is white which means purity and peace. When I was young, I watched a movie, I forget the name of the movie but I still can remember its story. The story was about a nurse. I saw how she serving the patients. I felt it is noble profession, it needs kind heart to take care diseased. So, I started dreaming that one day I can pass the nursing exam and serve everyone as well." Nurse, Dhaka

MOTIVATION #3

COMMUNITY

"I want to belong and contribute to the collective."

COMMUNITY THE DESIRE TO MAKE A DIFFERENCE EXTENDS BEYOND THEIR IMMEDIATE DAY JOBS

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.



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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 citizens 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.

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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.

"I have a unique expertise of treating diseases. So, the well-being of my family, relatives and neighbour is my responsibility. They also expect that I will take care of them, so I have to full fill that expectations and make them happy." GP, Dhaka

MOTIVATION #4

"I want to fulfil my role in society and set a good example."

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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.

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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

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DUTY OPERATING WITH A MINDSET THAT IS CONVENTIONAL, HARMONIOUS AND DEDICATED

RELIABLE AND CONSCIENTIOUS	CONSERVATIVE AND CONVENTIONAL	RESPECTFUL OF PEERS AND INSTITUTIONS	SERVICE ORIENTATED	UNCOMFORTABLE WITH CONFLICT
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.	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.	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.	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	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.

"I should play vital role for the country and as a teacher an aware teacher, it is my responsibility to teach my students besides academic contents that they should serve their patients with empathy and always maintain solid ethical values. I myself, always care about my countrymen's health and identify their problems, then to try to solve it as much as I can." Paediatrician, Dhaka

MOTIVATION #5

GROWTH

"I want to be leading conversations"

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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.

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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

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AMBITIOUS AND DETERMINED	EAGER WITH A CHALLENGE	READY TO LEAD	BIG-PICTURE ORIENTATED		
They have their eyes on a bigger prize. They are always looking for ways to enhance their career and opportunities for	Problem-solving is not a daunting task for Growth-orientated HCPs. Many enjoy embracing a new challenge and	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.	They tend to have a better awareness of the wider situation in their country – both current and future. This relates to health	They take pride in their achievements and often consider themselves superior in their knowledge and skills.	
personal and professional growth.	get a buzz from finding solutions.	They seek power and authority and want to be able to influence the wider medical community.	issues, but also to the politics of the medical world, and how that links to wider societal systems and government.	They want to be viewed as pioneers in their profession, and measure success by these individual achievements.	
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"We spend lots of time in studying. Otherwise, we cannot keep ourselves updated about new diseases and treatments. We also teach students. In the Pulmonary section, there is, FC, MD, and Diploma degree. We have to teach these postgrad students about different techniques of treating the patients. So, we have to study all time." Cardiologist, Dhaka



IMPLICATIONS FOR ACTION ON AIR POLLUTION

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

SECURITY	CARE	COMMUNITY	DUTY	GROWTH
"I want to get through the day unscathed."	"I want to give meaningful help to individuals"	"I want to belong and to contribute to the collective"	"I want to fulfil my role and act as a role model for others."	"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?	

PART 3 BANGLADESH HEALTH CULTURE

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BANGLADESH HEALTH CULTURE AT A GLANCE

A system that is struggling with severe shortages and many pressures

Overpopulation and low-financing have led to shortages of HCP personnel and infrastructure flaws – in turn creating intense patient demand and high HCP workload. Widespread poverty and low patient education remain challenging

Bangladesh has made progress in educating the population, but many still live in poverty and lack basic health care measures and knowledge. High costs and malpractice drive patients away from doctors

This creates a culture where patients are averse to seeking treatment and instead look to retail pharmacists, religious shamans and sometimes fraud doctors for a quick fix. An HCP culture that venerates high education

GPs and Specialists often working in dual roles to both treat and teach; the latter seen as a duty and also a route to greater status and legitimacy. Higheducated roles and professorships are applauded. Frustration in government mismanagement

of the system

Many HCPs believe that the government needs to improve monitoring systems and financing, and put an end to mismanagement, corruption for the health service to improve.

Results in MIDDLING sense of agency across HCP roles.

91% have taken action on a public health issue in the past – most commonly to advise patients.

Other roles are perceived <u>as mo</u>re challenging – e.g.

only **13%** believe that they could have significant influence over Government policy.

HEALTH CULTURES: BANGLADESH Dhaka serves as the hub for all of the nation's healthcare needs, its public healthcare serving as the backbone for the entire nation



"There are many challenges in our field. First of all, our country is overpopulated. As a result, there are lots of patients in our country. But there are not many specialists to treat this huge number of patients." GP, Dhaka

HEALTH CULTURES: BANGLADESH However, it is a struggling system mired with severe shortages; lacking HCPs & infrastructure to deliver timely, quality healthcare

HIGH PATIENT EXPECTATIONS

The population expects to receive quality healthcare, which is a fundamental right in the Bangladesh Constitution.

HOWEVER, HCPS FACE A NUMBER OF STRUGGLES

Lack of HCPs to meet demand:

- Insufficient number of HCPs and medical technicians against an excessive number of patients.
- Shortages also occur in the private sector, but are better managed.

Lack of infrastructural support:

- Health equipment tend is often old or out of order.
 Bureaucratic complexities and lack of coordination among the authority agents hinders the procurement and maintenance of necessary machines.
- There is also a shortage of beds that is worsened by overcrowding

RESULTS IN: CHAOTIC HOSPITAL ENVIRONMENT

As HCPs struggle to manage unhappy crowds who want medical care but fail to receive it.

 UNAFFORDABLE TESTS AND TREATMENTS

As these are often only available privately.

- INEQUALITY OF TREATMENT Wealthier patients pay bribes to secure hospital beds, while others sleep on hospital floor/veranda.
- HIGH HCP STRESS
 as they are facing the wrath of patients at
 the same time as trying to manage with
 limited resources.

"I can tell you about public hospitals. More than a hundred patients gathered at a time outdoor but the number of doctors is two. So, they cannot give treatment properly. **Patients** are shouting. This not a aood thing for a Cardiologist

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HEALTH CULTURES: BANGLADESH

Priority health issues often stem from Bangladesh's developing Fl infrastructure and economy, and the resultant pressure on living standards



SIGNIFICANT URGENT TOP 10 ISSUES (PROMPTED)

Q2a. 6 issues that apply from this list (including any that you stated in Q1 if relevant) Q2b.For the issues that you selected, (QUESTION 2a) please rank them in order of urgency CLEAN

HEALTH CULTURES: BANGLADESH And HCPs attribute the failures of the healthcare system to ineffective regulatory bodies

In particular, HCPs highlight:

Overall mismanagement

- The healthcare system has been severely suffering from mismanagement and absence of good governance.
- There is a perception that the bodies overseeing the medical system have little knowledge of healthcare
- HCPs think this contributes to the gap between demand and supply.

An ineffectual monitoring system

- HCPs indirectly express their frustration towards inefficient regulation. Proper monitoring and intervention can solve the worse problems that exist in the healthcare system.
- HCPs feel that guiding principles are required to ensure better coordination among the healthcare system's actors.

Corruption

Bribery remains a problem within the system and among patients.

Lack of funding in healthcare

The health system has not been prioritised in the budget.

"The monitoring system is poor in healthcare sector... the doctors cannot provide proper treatment to the patients. The authority is not efficient and effective to maintain smooth process of supplying tools and medicine regularly." GP, Dhaka

"Our health sector is suffering due to a lack of budget. The health sector only gets around 4-5% of the entire national budget that is lower even than any other least developed country. This covid19 shows us the real piteous image of our country's healthcare status" Paediatrician, Dhaka

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"First comes the mismanagement of our country. I don't think there is any problem greater than this. To say more it may be held against the authority. The health system is in the wrong hand. Those who don't understand it are managing it. There is dishonesty, bribery. Then there are also misunderstandings, the errors in our way of thinking. People are not getting proper treatments. But why aren't they getting it? Aren't the doctors treating them? Because of these mismanagements." Paediatrician, Dhaka

HEALTH CULTURES: BANGLADESH CLEAN Widespread poverty and low health education are still key challenges to improve health via prevention and early treatment

Despite good progress on improving health care in recent decades, HCPs feel that health education is essential in reducing the persistently high number of patients and the rate of illnesses.

Health knowledge remains limited

The wider population, especially the lower socioeconomic class, does not have knowledge about common diseases they usually suffer from like diarrhoea, dysentery, tuberculosis (TB) etc.

Basic preventative health measures are lacking, exposing patients to waterborne and airborne disease

- Poor living conditions still limit access to sanitation and hygiene.
- HCPs also feel that unawareness is a key cause of persistent health issues in the country, as these people do not know how to take precautions.

HCPs feel helpless and exhausted while treating and advising – like they are stuck in a never ending cycle

"Patients should know how they fall sick, what are reasons ehind these, how these could be prevented, etc. Our ople mostly focus on treatment but I think we should ocus more on prevention." Cardiologist, Dhaka

Si an er

'Poverty and ignorance. They can't understand anything Ve can't make them maintain their diet or medicine and can't treat them properly because of this." Nurse, Dhaka

angladesh is now considered as middle-income country out still poverty exists severely. People live in the slums or even roadsides. They don't not afford nutritional food; they on't have access to safe drinking water. They live in hygienic environments. As a result, they are vulnerable to water borne dis Pharmacist, Dhaka



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HEALTH CULTURES: BANGLADESH Even when patients know about health issues, high costs and low Fulture trust creates a cultural aversion to seeking medical treatment

The aversion to seeking medical treatment is driven by several factors:

The costs of healthcare are prohibitive, even in public system

- Patients are unable to afford treatment and medication
- They are also often unable to sustain and continue medical check-ups

Low trust in doctors

There is a perception that doctors unnecessarily recommend expensive treatments for personal profit, rather than patient health (because they may receive a commission.) These have been witnessed by HCPs as well.

Inaccessibility of care

Inability to secure medical appointments to receive treatment



"I have worked with many doctors. I have seen many garments workers come to the doctor. The doctor gives medical tests and the cost is 5000-6000 Tk whereas the monthly income of a garments industry worker is only 12000-13000 Tk. So, it is a huge burden for that garments industry worker. I have wondered how a doctor can do such a thing; those tests were totally unnecessary." Pharmacist, Dhaka

HEALTH CULTURES: BANGLADESH Patients thus turn to more accessible means and method to address their healthcare needs

Patients skip consultations with doctors to avoid lengthy waitlist and process and to reduce expenditure. Instead they turn to:

Retail pharmacists

- Pharmacists are increasingly becoming the first touchpoint to receive quick consultation with a healthcare professional and medicine for treatment (at least until a more serious condition arises)
- In theory this is easier for patients, but some pharmacies do not follow the necessary guidance and will over-prescribe antibiotics, resulting in more antibiotic resistance in the population.

Shamans and religious leaders

Lower educated and dominant religious culture also make patients turn to Shamans and religious leaders for 'treatment'

Fraud doctors

These doctors exploit the failures of the healthcare system by promising quick remedies – a particular concern for HCPs dealing with patients who have conditions that require long term management.

Homeopathic treatments

"It is a difficult job to make people understand the reasons of basic heath issues and motivate them to go the community clinics. Because they are not educated enough. They don't understand things easily." CHW, Dhaka

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"People of our country believe in non-scientific treatment. This is a major problem. Another issue is the financial problem of the patients of our country. People think that doctor gives them medicine and they will get well after taking medicine for 20-30 days. But non-communicable diseases like, hypertension, diabetes, hormone problem are not treated easily by taking medicine for a few days. These are lifelong diseases. But people don't try to understand that. Then they switch doctors who can cure them in a short time. In that case, fraud people take advantage. They tell the patient that they can cure long term diseases within a short period. Patients are not very much aware of long-term diseases. This is one of the major problems." GP, Dhaka

HEALTH CULTURES: BANGLADESH HCPs state high levels of influence when working within their

day-to-day remit as health professionals



ABILITY TO INFLUENCE EVENTS/PEOPLE

Ouantum Health Communities Research Oualitative Debrief

affect the following

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HEALTH CULTURES: BANGLADESH And most have taken action on a public health issue, typically advising patients, sharing knowledge or charity/NGO activity

Q7a. Have you ever been inspired to take action on a public health issue?



The most mentioned forms of action were:

ADVISING PATIENTS / PATIENT GROUPS (79%)

This is the type of action that is easiest for HCPs to deliver – both in terms of its easy fit with their day-today roles, but also because it is where they feel they have the most influence.

SHARING KNOWLEDGE AND RESEARCH (64%)

The emphasis on learning and academia within certain roles, plus the perceived need to educate the population makes this an important way to act on public health issues.

TAKING PART IN NGO OR CHARITY INITIATIVES (52%)

The lively NGO community and heightened HCP awareness of deprivation in the wider population creates greater urgency to take part in charity initiatives. "I voluntarily work at Bangladesh lung Foundation. We do it voluntarily. It is totally a non-profit organisation and everyone works for this after personal work. I did a radio program to generate awareness about lung diseases on the occasion of Lungs day, not for my personal benefit but for the sake of mass awareness without any payment. And another thing is personally making patients aware of all these." Respiratory Specialist

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Q7a. Have you ever been inspired to take action on a public health issue?

Q7b. What was the form of action that you undertook?

HEALTH CULTURES: BANGLADESH CLEAN Higher education, higher experience, and institutional endorsement increase professional legitimacy and trust between **HCP roles**

Bangladesh healthcare culture celebrates higher education and institutional endorsement, which are sought by HCPs to gain legitimacy as well as earn personal stature and prestige



Therefore HCPs seek:

- Continuous education and knowledge upgrading, through courses but also personal reading and learning
- Greater experience to gain higher trust and respect from peers, patients, and public
- Teaching roles in academic and government institutions are important badges of expertise and pride

Senior HCPs are especially conscious about their expert image, often to the extent that they don't feel comfortable to share their opinion on topics that are not relevant to their domain.

This results in a differing experience and different levels of status across HCP roles:

- 1. Doctors (GPs and Specialists): Most educated, with ability to earn government and academic accolades and titles.
- 2. Nurses: Extensively trained with professional degrees and are working most closely with doctors.
- 3. Community health workers: Have training on certain topics related to mother and child health.
- 4. Pharmacists: May or may not have training about basic health issues, symptoms etc. Generate knowledge from experience.

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HEALTH CULTURES: BANGLADESH This results in HCPs, especially doctors, playing dual roles in order to serve patients while earning professional prestige



GPs and Specialists often fulfil both:

PRACTICE OF TREATMENT

Typically in two locations:

- In the public health centres and hospitals This is regarded as a duty and earns respect, despite lower salaries and daily stress.
- In private doctor's chambers (often a preference)

More appealing due to higher financial gain, higher SES and educated patients, better facilities, and lower overall stress.

TEACHING AND ACADEMIA

- Teaching in
 - Medical colleges
 - Government academic institutions
- Researching and writing articles
- Participating in knowledge-sharing sessions, seminars and conferences with peers
- Professorship is highly respected in a country that values education.

"In the morning, I go to college and take classes for graduate students. After finishing the lectures, I go to follow up indoors patients. Sometimes I see patients at outdoor section as well. After seeing the patients, I spend some time supervising the thesis of my students. In the afternoon, I go to my chamber and see patients there till 9-10 p.m." Cardiologist, Dhaka

HEALTH CULTURES: BANGLADESH And it is also reflected in HCP's motives for acting on public health issues: fulfilling professional duties is one of their top reasons

HCP's top reasons for taking action on a public health issue:



PROFESSIONAL OBLIGATION

Professional obligation / professionalism / part of my role/Share knowledge / experience



MAKING AN IMPACT

For the general good / betterment of society / doing the right thing / to help others/ positive impact/ Issue close to heart



BETTER HEALTH Improve health, healthcare delivery and access to healthcare CLEAN

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"I want to state two things here - I'm a doctor but I'm also a teacher. Firstly, when I treat a patient and they get better and becomes satisfied with the treatment and go home happily - that moment is the happiest for me. The intention you had while treating the patient has become fulfilled. Secondly, when the students who are learning from you become able to implement the teaching in their work and gets educated, you can clearly see the way you have taught them and made them learn practically has been well-learned that they can imply it clearly - both of these are a significant thing for me." **Respiratory Specialist, Dhaka**

HEALTH CULTURES: BANGLADESH Professional networking is also sought to gain security, knowledge, and pride, and is found in medical associations

Most HCPs also turn to established associations, organisations so that they can preserve their professional rights and also maintain network of among fellow HCPs.

In particular, they highlighted three key benefits to networking within these professional associations:

Security and togetherness

It provides comfort, security and bonding within a network of other fellow HCPs

Knowledge advancement

A platform to share knowledge

Professional and social pride

Evokes a sense of prestige in being a member, or associated with such organisations in some way (e.g. as a consultant, or volunteer) "I am a member of Bangladesh Medical Association (BMA). This is an effective platform which helps doctors to be united. Though there are exclusive associations for doctors belong to same specialized field. Like I am a cardiologist and our association name is the Bangladesh cardiologist society." GP, Dhaka

In qualitative research, HCPs particularly mentioned

- Bangladesh Medical Association (BMA): integrating all doctors under single umbrella.
- Specialist associations, such as: Bangladesh Lung Foundation, Bangladesh Association for Bronchology and Interventional Pulmonary.
- Nurses, CHWs and pharmacists also have their separate associations as well.

While medical associations are important, HCP's most trusted sources of information include both associations and other providers:







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HEALTH CULTURES: BANGLADESH Despite the failures of the system, HCPs acquiesce to institutional authority, as working with them is necessary to create change

There is a strong top-down hierarchy within both wider society and the healthcare community.

HCPs are cognizant that they are unable to change the system, to create positive outcomes in public health on their own.

They are also conscious that while they have criticisms of the government, ultimately are working as government employees.

As such, they continue to cooperate with authorities, as the government and established institutions have the influence to improve both the healthcare system, as well as public health.



Top-down flow of Bangladeshi hierarchy:

- 1. Government
- 2. Ministry of Health Services, Ministry of Family Planning
 - Medical colleges
- Ministry of local government, rural development, and cooperatives
 NGOs
- 4. Individual hospitals, health centres
- 5. Individual HCPs

"As a government employee we are not allowed to share opinions, statements which can temper Government's image." GP, Dhaka

HEALTH CULTURES: BANGLADESH But HCPs feel far less empowered to influence wider change outside of their immediate medical world



ABILITY TO INFLUENCE EVENTS/PEOPLE By comparison, over 2.49 Practices and policies of a commercial organisation (e.g. Pharma 2.38 90% of HCPs feel that 18% (2.45) 2.4/ company) GPs they can influence their **9%** 2.42 peers, friends and 2.67 2.46 family and patients. Local Government legislation about healthcare & wellbeing 20% (2.80) 3.40 Respiratory **13%** 2.54 40% feel that they can influence the practices 2.76 24% (2.88) 2.46 of where they work. National Government legislation about healthcare & wellbeing 3.40 Respiratory 33% (3.40) **13%** 2.58 Midwifes 2.93 Health & well being Policies and priorities of advocacy, NGOs or 2.78 3.53 charities 40% (3.53) 13% 2.84 Midwifes 3.61 3.49 Policies and guidance for the wider medical community 50% (4.28) GPs 4.20 53% (4.20) Midwifes **29%** 3.54 2 3 5 Δ 6

Health Communities Research Qualitative Debrief

% indicates the proportion of HCPs stating significant influence

Q6. Thinking about your ability to influence events and people, please indicate how much or how little that you geel you can affect the following



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BANGLADESHI PERCEPTIONS OF AIR POLLUTION AT A GLANCE

There is fairly high recognition of air pollution in Bangladesh, although it is not considered a priority.

It is seen as something that should be tackled, but not before the country resolves its challenges with vaccination and medicine shortages, inequality and strain on the health system. They mains reasons HCPs deprioritise it are:

A focus on more immediate problems

HCPs believe there are more critical health issues – for example poverty, malnutrition, infectious disease.

At the same time, they are so busy and under-resourced within an over-burdened system that they only focus on urgent issues. Incomplete evidence of the link to serious health impacts

Doctors understand what air pollution is but regard it as one causal factor among many when it comes to serious health impacts. Other roles have an even more superficial knowledge of its links to health.

All HCPs view air pollution as a problem that will impact the health of the next generation more.

A problem for government and higher powers to solve

HCPs associate air pollution with issues such as water pollution, soil contamination etc. And they feel that as an environmental problem it's beyond their expertise to address.

Ultimately, they believe that the government needs to lead the fight against air pollution if it is to be successfully eliminated. Results in a **LOWER** sense of issue motivation.

There is minimal medical discourse around the issue, but HCPs are prepared to help raise awareness.

They suggest looking at previous successful public health campaigns for inspiration.

PERCEPTIONS OF AIR POLLUTION: BANGLADESH There is fairly high recognition of the AP issue, consistent across HCP roles

This is due to multiple mutually reinforces points of evidence:

1. MEDIA REPORTS

Official reports and news media highlighting Dhaka as one of the most polluted cities in the world

2. VISIBLE CAUSES

HCPs correlate the rise of AP with causes such as rapid and widescale construction projects, with the spike in AP they can observe around them.

3. RISING RELATED ILLNESSES

Personal and professional experiences of the rise of AP-linked health issues

However, some HCPs feel that their growing population has caused various number of socio-economic problems, and amid those problems, AP fails to register as a priority.



of HCPs have personally seen

significant health related consequences as a result of air pollution **on their patients health**

"I came to Dhaka from my home town when I started college. The environment was so refreshing then. There were a smaller number of motor vehicles on the road. There was more greenery. Even a few years ago, the air quality was way better. Now the city is full of dust and fumes."

Cardiologist, Dhaka

PERCEPTIONS OF AIR POLLUTION: BANGLADESH They see the causes as multi-factorial, but rapid, unplanned, unregulated development and urbanisation is the main culprit

HCPs believe that the causes of air pollution in Bangladesh are multi-factorial – related to several different practices, industries and social development trends, with urbanisation as the biggest driver:

Sources of outdoor air pollution include:

Urbanisation and construction:

- The biggest contributor, including construction of mega building, roads, infrastructure and privately-owned properties.
- Some HCPs believe that constructions sites aren't following any specific guidance or regulation to reduce air pollution.

Vehicle fumes

- High number of vehicles, with rising middle class driving demand for car and vehicle ownership
- Lack of government enforcement on fitness check of vehicles to limit smoke emissions

Factory Emissions

A large number of textile and leather factories are located near the city, while there are brick kilns in the suburbs

Poor Waste Management

For example the burning of non-biodegradable waste

Degradation of greenery

Urbanisation has caused the proportion of greenery to decrease.

They also identify several indoor air pollution sources:

- Smoke from burning mosquito repellent coil
- Cigarette smoke
- Smoke from cooking with bio fuel



"In Mirpur, they are urbanizing a lot... But we fail to make proper plan on how to develop the city properly, and at the same time we fail to abide by existing laws... Most construction involves destruction of first establishment and then reconstruct. So, when those buildings are being destroyed, it spreads dust-particulates and it is another big reason for air pollution."

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"The pollution is very harmful to Bangladesh that measures 55 thousand square miles and 17-18 crore people live in this congested area. Only in Dhaka city, there are 20 million people. The AP is getting severe with such a heavy population. Moreover, the city doesn't lack in vehicles. People may have a shortage of money but they don't have a shortage of vehicles. There are too many moto vehicles in the roads. And many of these cars don't even have any fitness." Paediatrician, Dhaka

PERCEPTIONS OF AIR POLLUTION: BANGLADESH CLEAN HCPs identify several key demographics who are exposed to AP and at risk of suffering related health issues

URBAN RESIDENTS IN GENERAL

The urban people who reside at the locations near to the construction sites of mega public projects. People who commute to workplace in public vehicles on regular basis and get stuck in traffic congestion

FACTORY WORKERS

In the leather factories, brick kilns and textile factories directly get impacted by chemical emission and smoke from the manufacturing process.

CHILDREN/AGED PEOPLE AND WOMEN

Regular exposure to the smoke of mosquito-repelling incense/coil and cigarettes hampers the respiratory system of the children and aged people. This segment is prone to be affected by indoor pollution than outdoor pollution since they largely stay at home. Women who uses bio fuel (wood) for cooking are exposed to smoke in kitchen.



"I have noticed that people of Dhaka city are more affected by respiratory disease than the countryside people. Children are affected more by pneumonia because of air pollution. People who work in the brickfield are more likely to affect respiratory diseases. Patients cannot control asthma ecause of increasing air pollution." Respiratory medicine specialist, Dhaka

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PERCEPTIONS OF AIR POLLUTION: BANGLADESH A large number of HCPs believe that air pollution is a priority public health issue – yet a significant minority have not acted



TOP of mind issues in order of URGENCY

(ranked as the top 3 issues, unprompted question)

53% Bangladeshi HCPs

placed air pollution among their top 6 most urgent health issues in a follow-up question (from a prompted list) Yet only 10% Bangladeshi HCPs describe themselves as actively involved in campaigns or activities to help (rising to 36% among respiratory specialists)

> And 35% Bangladeshi HCPs have not yet taken any action to tackle air pollution or improve air quality.

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Q1. Thinking about the different issues affecting the health and well-being of your community - what are 3 most pressing issues that first come to mind? Please write in order of most urgent first.

Q17 Which of these statements best describes your personal attitude towards air pollution?

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

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PERCEPTIONS OF AIR POLLUTION: BANGLADESH CLEAN Overall, HCPs express low urgency to address AP issue today, due FUND to 3 key factors:

A FOCUS ON MORE IMMEDIATE PROBLEMS

INCOMPLETE EVIDENCE OF THE SERIOUS HEALTH IMPACTS

IT IS SEEN AS A PROBLEM THAT GOVERNMENT AND HIGHER POWERS NEED TO SOLVE

PERCEPTIONS OF AIR POLLUTION: BANGLADESH A FOCUS ON MORE IMMEDIATE PROBLEMS



The urgency of AP gets diluted among Bangladesh's diversified range of public health problems

- There are more critical social and health issues (poverty, malnutrition, water borne disease, seasonal diseases like dengue).
- Some of the diseases are even life threating and social issues that are still unsolved.



"There are many challenges in the healthcare sector. Our country is overpopulated...But there are not many specialists to treat this large number of patients. The poorest people are affected by TB, dengue, and diarrhoea. The hospital beds are insufficient for the number of patients. Another challenge is the number of respiratory specialists is limited." GP, Dhaka

"I have to do my own job and that is to treat people. After that I don't have much time left to work on other problems." GP, Dhaka

This contributes to a bystander mindset around air pollution

- Moreover, HCPs opine that Bangladeshi people have a tendency to comply with the problem rather than address it as survival mechanism.
- The majority of HCPs are so busy to make ends meet that they hardly focus on such environmental issue like AP.
- There is also a perception that AP only impacts cities, vs issues that affect the whole nation.

"We don't even try to identify the issue. Secondly, we have no intention of understanding the problem. There is a major problem in our attitude- we think everything will fix itself. We don't realize that it is us who need to take steps to prevent it." Cardiologist, Dhaka

PERCEPTIONS OF AIR POLLUTION: BANGLADESH INCOMPLETE EVIDENCE OF SERIOUS EFFECTS



Doctors have a deeper understanding of the causes and nature of AP, recognising its potential future health hazards

This is because doctors:

- Work in academia provides knowledge of AP as a health threat.
- Have access to medical journals, research papers, seminars.
- Knowledge of social welfare organisations and NGOs working on environmental issues, including air pollution.
- Seem interested in studying and treating an emerging issues, which provides them higher visibility and prominence.

Other HCP types have a more superficial understanding

- Most are only able to articulate general health impact, such as cough and respiratory problems.
- Most non-doctor HCPs also have no access to, or are not interested in medical knowledge around AP, beyond the passive consumption of public information on the issue.



27% HCP's overall feel that they fully understand the ALL health impacts of air pollution and could advise patients with confidence

59% would only be confident explaining SOME of its effects

10% would not be confident explaining its effects

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Q8. Considering air pollution in particular, how would you rate your confidence in understanding and explaining its effect and impact on health & well being?

"The five elements which are the major agents for air pollution, one of them is suspended particles, which is also called particulate matter, sulphur dioxide, nitrogen dioxide, carbon monoxide, these are the common agents from all the sources. Then comes the pollution from our daily life commodities, like you are using stoves at home, refrigerators, asbestos in building home, they are all sources of particulate matter. As I am sitting here in a well-constructed room, there are radon gases coming from the walls and this is also carcinogenic. So, they are all accountable for air pollution." GP, Dhaka

PERCEPTIONS OF AIR POLLUTION: BANGLADESH INCOMPLETE EVIDENCE OF SERIOUS EFFECTS



However, the linkage between air pollution and the health impacts are inconclusive and uncertain, even for doctors

CAUSES OF AIR POLLUTION

Recognised and understood by all HCP types

UNDERSTANDING AIR POLLUTION

Doctors: Deep understanding of the science around AP

Other HCP types: superficial understanding of what AP really is

HEALTH IMPACTS OF AIR POLLUTION

All HCPs see AP as a threat to health, but are uncertain as to the specific health issues AP causes, and their degree of severity.

- Doctors able to articulate more specific issues, but view AP as just one of the factors
- Other HCP types: generic understanding of AP health impact e.g. cough, breathing issues

"At present, I am having child patients with the problem of the respiratory, problem of lung, lung function, etc. These can be due to air pollution. They are not directly related to air pollution but they are related in the other way. Suppose, they are victim of passive smoking or developing the problem due to excessive dust and harmful chemicals in the air". GP, Dhaka

PERCEPTIONS OF AIR POLLUTION: BANGLADESH INCOMPLETE EVIDENCE OF SERIOUS EFFECTS



"It may cause fibrosis in lungs. It may also cause pneumonia and cough as well. It will start as little issues like this and may even lead to bronchitis later. This needs time to develop. There is no prominent research happened locally addressing how these issues develop due to AP. So, it's not right that I know a lot. I don't even know all the health issues cause for air pollution properly. The only thing I can tell is what change it causes to the lungs." Cardiologist, Dhaka

Most view AP as a problem in the future that will affect the next generation more

Air pollution is acknowledged as a time bomb for the future

- Many GPs and Specialists think air pollution is going to have a potential health impact in future if measures are not taken now. They understand that AP is a problem that impact a person's health not immediately but in long run.
- They can see some signs in terms of causes and a few health impacts today.

But there are no urgent impacts in the present

- In general, they haven't observed too many severe or acute impacts for it to be considered an emergency.
- HCPs in general are unable to articulate what the health issue will really be; it feels like a vague challenge in the hazy future.

PERCEPTIONS OF AIR POLLUTION: BANGLADESH CLEAN A PROBLEM THAT GOVERNMENT AND HIGHER POWERS NEED TO SOLVE FUND

HCP's view of air pollution as an environmental issue contributes to their lack of urgency and motivation

HCPs associate air pollution with other distressing environmental elements such as water pollution, soil contamination etc.

Therefore they feel that AP today is much more of an environmental issue, which is beyond the area of expertise of HCPs to address.

As a result, ownership is thrust to:

- 1. Environmentalists
- NGOs whose work focuses on structural problems including environmental issues
- 3. Government

Historically these environmental issues were addressed by the environmentalists and prominent social welfare organizations, whom HCPs expect to continue leading the fight alongside government. These include:

- BELA (Bangladesh Environmental Lawyers Association)
- USAID
- Clean Air Asia
- Bangladesh Environment and development society

"Patients are not directly causing air pollution. Mostly the policy system, industries are responsible for air pollution. And poor patients are victims of this. I can't advise my patients about it. They can't get away from the environment."

Cardiologist, Dhaka



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PERCEPTIONS OF AIR POLLUTION: BANGLADESH CLEAN A PROBLEM THAT GOVERNMENT AND HIGHER POWERS NEED TO SOLVE FUND

Ultimately, they believe that the government needs to lead the fight against air pollution if it is to be successfully eliminated

Government is expected to lead and take ownership of action because:

- The key causes of AP are mega development projects, industrial and vehicle smoke emission.
- AP is a component of wider environmental pollution issues in Bangladesh, and should be treated as integral part of environmental pollutions. Therefore, there should be an integrated action plan in place in order to handle AP as a comprehensive approach.
- As the highest authority, they have the greatest chance of creating change.

Past precedents show that government can create effective change on public health

In the past, government had effective awareness program to address children vaccination, water pollution etc. But in case of AP, visible activity of Government is absent. Thus, despite of being an evident issue, AP does not get the required priority



'Air pollution is caused by big, influential industrialists. These industries do not follow the rules and regulations as they have the power to manipulate the authority. So, people who work to prevent air pollution get huge pressure from these industrialists. Thus, an individual cannot fight against them. Organizational movement and pressure are needed." GP, Dhaka

PERCEPTIONS OF AIR POLLUTION: BANGLADESH Low ownership and urgency also results in minimal medical discourse around air pollution

Air pollution is rarely discussed amongst HCPs

It is only mentioned during key events in the year such as Pulmonary Disease Day where there is an increased focus on respiratory disease and its aggravating factors.

Limited discussion with patients, unless an obvious connection

HCPs only occasionally talk about AP with patients, when an AP cause is seen to be a key factor patient is exposed to, thus leading to health risk or issue.

Recently there has been more coverage of air pollution in the media

However, there is lack of adequate programs on television. The media coverage of other issues such as water pollution and climate change is higher than that of air pollution "I don't have the time to study about air pollution. I can read it from newspaper or I can listen to some people but I don't want to read because I have to see patients and take classes...I don't even get enough time to read about my own subject, why would I read about this?" Cardiologist, Dhaka

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PERCEPTIONS OF AIR POLLUTION: BANGLADESH CLEAN Despite the perceived urgency of air pollution, HCP action is limited FUND and primarily concentrated on advising patients



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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?

PERCEPTIONS OF AIR POLLUTION: BANGLADESH HCPs are ready to play a role in raising awareness, but feel that they are not well placed to act beyond that

HCP'S ARE ONLY COMFORTABLE ACTING WHERE THEY HAVE EXPERTISE

- HCPs have a mind-set that they can address health issues only because of their knowledge in that particular field.
- They feel that they are not equipped with adequate expertise to take up social activity against the problem.

ADVISING PATIENTS IS SEEN AS THEIR NATURAL ROLE

- They could imagine contributing by raising awareness among their patients only.
- Some are also ready to participate in creating awareness among the wider population.

BUT THEY LACK THE KNOWLEDGE AND CAPACITY TO DO MORE

- They do not see themselves engaged in formulating strategy or get involved in different action plan to implement the strategy.
- Their tight work schedule also refrains them from taking part in extensive social commitment

"When a patient comes with respiratory problem, then sometimes I ask about whether he lives or work in areas where air quality poor or not. These are the routine questions." Respiratory medicine specialist

"Health care professionals won't work about air pollution. The one who are related to the respective authority should work on it. They should be utilized properly. Everyone must do their own work. No one will come to do your task." Paediatrician, Dhaka

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PERCEPTIONS OF AIR POLLUTION: BANGLADESH Some think that an air pollution campaign could mirror previous successful public health education campaigns

While there is still work to be done, Bangladesh has witnessed commendable progress in its efforts to educate the population on important health and social issues.

HCPs mention some proven methods which have helped to create awareness about drinking safe water, using safer sanitation, importance of vaccination etc in the past:

Creating awareness at the right touchpoints

- Content in primary school textbooks and means for least literate people to have exposure to basic knowledge of healthcare
- Educational content in TV generate awareness about health, socio cultural issues at greater level.

Door to door visits/yard meeting of CHW

Community health workers' direct engagement has effectively delivered health education and information to deprived populations.

NGOs' activities

i.e. advocacy and campaigning program work as an eye opener to the masses about different sociocultural issues and superstition

Government endorsement to drive compliance

Government is the supreme, legitimate authority, and the general population easily rely on the communication from Government and its supportive agencies.

Using understandable and engaging language in designing content and material:

- Using more popular native/ colloquial language.
- Iconic characters: for example, the popular cartoon Meena form 90s educated the mass people about personal hygiene and social issues.
- Simple and less text with illustrations: effective for fast learning.

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"I can remember Meena cartoon. This animated character created revolution in our society. People became conscious and started washing hands before having meal and after using toilet." GP, Dhaka

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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."

(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."

MOTIVATORS

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"

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APPENDIX SAMPLE & METHODOLOGY

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QUAL 1hr in-depth interviews				
HCP Specialism	No. Bangladesh			
Generalist (GPs or Family Practice doctors)	3			
Specialists: Lung / Respiratory	2			
Specialists: Paediatricians	2			
Specialists: Cardiologists	2			
Community health workers	2			
Nurses	2			
Midwives	1			
Pharmacists	2			
Total	16			

QUANT 15 minute survey	
HCP Specialism	No. Bangladesh
Generalist (GPs or Family Practice doctors)	40
Specialists: Lung / Respiratory	25
Specialists: Paediatricians	25
Specialists: Cardiologists	25
Nurses	25
Midwives or Post-Natal Health visitors	15
Community health workers	25
Pharmacists	20
Total	200