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FEATURE



The doctors navigating covid-19 with no internet

Like many countries, India has entered a nationwide shut-in to protect its 1.3 billion citizens from coronavirus. But communications blackouts in the conflicted region of Jammu and Kashmir make lockdown doubly frightening, confusing, and dangerous, writes **Puja Changoiwala**

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After diagnosing and treating an increasing number of patients with covid-19, Abdul Raheem (not his real name), a medical professional in the north Indian state of Kashmir, is faced with another major daily challenge—accessing medical literature and guidelines around the pandemic.

Before the global crisis hit, the Indian government had lifted a seven month communications blackout in the region—but restricted internet access to 2G services. For Raheem, that's meant hours each day trying to download up-to-date medical journals, load videos showing procedures such as the use of hazmat suits, and access information about clinical trials on new vaccines. Raheem spoke to *The BMJ* under anonymity after the Indian government threatened "strict action" against doctors criticising the administration's handling of the pandemic in the media or social media.

"Only recently, a hospital in Wuhan published an e-book with guidelines on how to manage patients. It took me more than half an hour to download the 22 MB file," said Raheem, a resident doctor in Srinagar, the summer capital of Kashmir. "New data and facts are emerging every day; our perspective about covid-19 is changing every day. With a lack of high speed internet, it's extremely difficult to remain updated. This also affects diagnosis, prescribing, and treatment."

Even as the pandemic gains momentum in India, residents of the Jammu and Kashmir region —which at the time of writing has reported 106 confirmed cases¹—are unable to access complete information about the threat.

Communications blackout

India routinely blocks internet access in parts of the country, citing public safety and national security reasons. The majority of these have been in Jammu and Kashmir (180 out of 385 shutdowns since 2012). In August 2019, after stripping Jammu and Kashmir of its semi-autonomous status, the country blocked all internet and broadband services for the Muslim majority region, which has been the centre of an armed revolt against the government for three decades.

On 5 March, after 213 days, the government restored internet services for Jammu and Kashmir. The relief, however, came with conditions "in the interest of sovereignty and integrity of India, the security of the state, and for maintaining public order."² Internet was restricted to 2G networks, there were no mobile internet services for prepaid users, and MAC binding, which helps authorities trace online activity to its user's device, was instituted.

Amid escalating fears over covid-19, Kashmiris furiously Googled "pandemic," generating the highest number of searches for the word from a region in India.³

"The coronavirus is spreading rapidly and people need information on where the disease is, how it is affecting people, and where patients can go to get help," said Darrell West, director of the Center for Technology Innovation at the Brookings Institution, based in Washington, DC.

Without high speed internet, the population is deprived of information about best practice on social distancing and washing hands, said lawyer Nakul Nayak, a former Google public policy fellow who authored a paper on India's internet shutdowns.

To help reach its citizens through multiple channels during the pandemic, the Indian government has launched an official coronavirus tracking app, WhatsApp and Facebook messenger chatbots, and a dedicated covid-19 Twitter account.⁴⁻⁷ But with internet restrictions, the residents of Jammu and Kashmir struggle to access these.

"Because these official channels of communications are not available to people in Kashmir, there is a vacuum of information, which is resulting in a lot of fake news and misinformation in the region," Nayak told *The BMJ*.

"Even simple things like video calling your loved ones to help you get through this difficult time is not possible on 2G networks," he said. "We cannot imagine the mental difficulties that people might be facing."

Anuradha Bhasin, executive editor of the *Kashmir Times*, the largest circulated English language daily in the region, told *The BMJ* that even 2G services are "very erratic," with users unable to open images and attachments, download files, or view videos.

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Data heavy sites are especially difficult to access, and users can barely open their emails.

"Governments across the world are encouraging a work from home culture during the pandemic, but that's not possible in Kashmir. Most people do not have broadband or fixed line internet connectivity in their homes," said Bhasin, who filed a writ petition against the internet blackout in India's Supreme Court in 2019.⁸ What's more, 2G services are only available on billed mobile services, while the majority of Kashmiris are using pre-paid connectivity. E-learning is also impossible on 2G networks. "Bankers, traders, medical professionals, researchers, students—everyone's work is suffering. E-commerce is virtually non-existent," said Bhasin.

Medic challenges

Exasperated with the slow connection, Khawar Khan, a doctor in the region, took to Twitter. "I wish I had 4G, it took me whole night to download a paper so that I could prepare for upcoming ER duty," Khan wrote on 22 March.⁹ "An internet connection, especially in a pandemic, is like an eye to the emergency physician. Kindly don't blind us in that eye."

Iqbal Saleem, professor of surgery at Srinagar's Government Medical College, tweeted, "This is so frustrating. Trying to download the guidelines for intensive care management as proposed by doctors in England. 24MB and one hour. Still not able to do so."¹⁰

"The internet restrictions have hampered our work," a doctor from Kashmir told *The BMJ* under anonymity. "Only recently, I was trying to have a video call consultation with a patient, but couldn't, owing to the slow speed. With the covid-19 pandemic, many doctors around the world are opting for online consultations. That is not possible for us, and patients are compelled to visit hospitals. The internet restrictions and infrastructural limitations in Kashmir are stretching us beyond limits."

Nayak said that the restrictions are catastrophic for medical professionals in the region already suffering staff, equipment, and personal protection equipment shortages¹¹ and now trying to understand a new disease. "Doctors and healthcare workers have to adhere to best practice guidelines published by organisations like the World Health Organization, and yet they're not able to access this content in the best possible way," said Nayak. "Medical professionals are most critical to containing this pandemic, and they are deprived of information here."

A fundamental right

Ruling on Bhasin's petition in January, the Supreme Court of India ordered the Indian government to review the internet blockade,¹² stating that any order suspending internet access "must adhere to the principle of proportionality and must not extend beyond necessary duration." But the state has failed to live up to the ruling, Bhasin said.

"Depriving citizens of internet connectivity right now is not just deprivation of fundamental rights, it's criminal in act, and it's going to be devastating for the region," she said. "I fear that frustration will lead to increased mobility outside, as opposed to the universal guideline of staying indoors to limit covid-19 infections."

Darrell West told *The BMJ* that internet access could help to maintain peace by stopping panic. "The internet allows people to see how hospitals, doctors, and patients are dealing with the crisis. Without regular updates, people may panic, and assume worst case scenarios. Governments need to recognise that internet crackdowns may make the pandemic worse by denying sick people the opportunity to find information and see how care providers are dealing with the disease."

On 19 March, Amnesty International called on the Indian government to adopt a "rights respecting approach to protect public health," asking the state to mitigate the risk to Jammu and Kashmir and restore full access to services immediately.¹³

"Information at this time is vital," said Bhasin. High speed internet is imperative, especially for medical professionals to learn from strategies elsewhere. "Research is being conducted the world over, and advice is constantly evolving. Doctors need to have access so they can identify what is workable in conditions like Kashmir."

Competing interests: I have read and understood BMJ policy on declaration of interests and have no relevant interests to declare.

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