“There’s now an app for that”
Bringing COVID-19 knowledge and skills directly to health workers around the world

The COVID-19 pandemic is an unprecedented global crisis. Its relentless spread has left a trail of illness and death in many parts of the world.

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Even so, most countries are still in the early stages of their own battle with the virus. It is abundantly clear that COVID-19 will be with us for a long time.

At the same time, the pandemic is spurring innovation as governments, health partners and organizations around the world move as quickly as they can to find ways to counter the virus’s spread, including the development of new diagnostics, new therapeutic treatments for those who become ill, and eventually bring forth an effective vaccine.

The world needs these tools, and it needs them fast.

A key objective of the World Health Organization has been to support the millions of health workers around the world, many of whom have been thrust into the forefront of the response to COVID-19 and are making heroic efforts – under enormously challenging circumstances and personal risk of pathogen exposure – to treat those afflicted by the disease.

Accordingly, the WHO Academy, an internal WHO division that upon its launch next year will become the organization’s digital lifelong learning and training centre for global health, was called upon by senior WHO management to apply the latest digital technologies and adult learning science to develop a practical solution for helping all health workers upgrade their skills and capabilities relative to COVID-19.

As a starting point for our work, the team looked at the essential challenge. The problem was not a lack of information and content, as WHO already has hundreds of COVID-19 guidance documents, training packages, tools and publications which have been produced by different departments and regions, targeting a range of key audiences including health workers, policy makers, public health officials and staff from WHO and other United Nations agencies.

The issue, rather, was how to develop a convenient platform and method of conveyance that would be accessible on demand to the many millions of health workers and others who need it to build their COVID-19 related knowledge and skills. Additionally, we needed to find ways to advance learning at a time when a pandemic is limiting opportunities for more traditional training approaches involving face-to-face contact, not to mention the enormous stress and demands on their time that so many health workers are facing.

We concluded that a mobile learning app, available to anyone via smartphone or tablet, would be the best way to speed information, tools and a virtual classroom environment to health workers in almost any setting. An app could be developed quickly. It would be available in low-bandwidth and low-resource settings, and it would be available on demand.

It was clear that to develop an app that would truly be effective in supporting health workers during such a critical period in their careers, we would need more baseline information about their wants and needs. While the initial steps to build the app’s architecture were underway in mid-March, we created and distributed an online survey for health workers that was aimed at validating our approach and specifically the proportion of health workers who would find the app useful and accessible.

Within a little more than a week, we received 10,000 responses from health workers from all regions of the world and covering a broad range of disciplines. That number has since more than doubled, giving us a great deal of visibility into how health workers get their information on COVID-19 and what types of skills they feel they need to improve in the short term – and, most importantly, whether they would access such information on their smartphones and/or tablets if it was available on those devices.

The survey confirmed a number of
critical points. First, while three-quarters of respondents indicated they are at least somewhat competent and prepared to respond to the COVID-19, fully half of them feel they still need more information to be fully prepared. It also found that more than 70 percent of health workers already use the WHO for guidance on COVID-19, while the same percentage indicated that they would be open to using virtual learning on demand – online training materials, interactive workshops or mobile learning applications – to prepare for COVID-19 challenges.

And to validate that a mobile learning app could successfully reach a large number of health workers, more than 80 percent of respondents said they use their mobile smartphones and tablets to access information on the internet. This compared to 56 percent who said they use laptop computers.

From this, we knew that we were on the right track in developing an app for health workers, and the survey also confirmed the areas and topics where they felt the greatest need to build their COVID-19 related skills – infection prevention control, which was named by 43 percent, followed by case management (42 percent), use of personal protective equipment (41 percent), staff safety and health (38 percent), and risk communication (32 percent). This information has been critical in helping us design and present the app’s key learning areas.

As we worked to bring all the elements together into one app, we faced a number of challenges, including the process of collecting and organizing content, developing a content management system that would ensure that content on the app was always updated, and creating a virtual learning environment on which we could run virtual classrooms, workshops and webinars.

By the time we launched the app at the end of April in both the Apple Store and the Google Play store, we felt we had developed a key learning tool that would bridge a lot of gaps in COVID-19 knowledge and skills among a widely dispersed health workforce numbering in the hundreds of millions.

Going forward, we have high hopes that the app will have real impact in enabling health workers to build their skills and improve their preparedness to respond to COVID-19 – and that it will play an outsized role in enabling them to save lives and protect themselves in the challenging and critically important work they are called upon to do.

*The authors are members of the WHO Academy’s development team. To learn more about the WHO Academy and its mobile learning app, go to http://academy.who.int. The link to the app in the Google Play Store is: https://play.google.com/store/apps/details?id=org.who.WHOA The link to the app in the Apple App Store is: https://apps.apple.com/us/app/who-academy/id1506019873?s=1

Clinique Valmont offers a specific rehabilitation program entirely dedicated to patients who have been affected by the coronavirus. The program is personalized and targets each patient’s needs - ranging from pulmonary reconditioning to more important neurological treatments.

If the majority of patients fortunately have no post COVID-19 sequelae, some of them, more seriously affected, require a general reconditioning or a specific therapeutic program. Indeed, long-term hospitalization in intensive care (with or without respiratory assistance) can cause:

- Pulmonary deconditioning
- Musculoskeletal disorders
- Cachexia
- Brain damage
- Peripheral polyneuropathies
- Fatigue

The rehabilitation programs last 3 to 6 weeks, depending on the therapeutic objectives and the clinical condition of the patient. The therapeutic objectives are defined by a multidisciplinary and highly qualified medical team, composed of doctors, physiotherapists, occupational therapists, speech therapists, neuropsychologists and nurses.