

Enhancing capacity and use of digital health in the Eastern Mediterranean Region: an urgent priority for action

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The Eastern Mediterranean Region (EMR) faces massive challenges that threaten people's livelihood and health due to multiple factors, including socioeconomic disparities, conflicts and emergencies in many countries of the Region (1). The COVID-19 pandemic has further exacerbated these challenges and significantly disrupted access to essential health services. As highlighted in recent flagship reports, the region is unlikely to achieve health-related Sustainable Development Goals (2,3), unless crucial changes are made in the way the goals are pursued (4,5). Effective implementation of digital health technologies could provide opportunities to enhance the response to the pandemic, as well as improve the access to health services and develop stronger and more resilient health systems (6,7). Such technologies are widely used to provide more efficient connectivity and access to health information; better access and quality of health care services; cost-effective systems and services; reaching out to remote, rural and migrant settings; monitoring health outcomes; supporting health decision-making as well as facilitating emergency response (7). However, the adoption of digital health solutions without a strategy that identifies country priorities and community context could lead to fragmented short-living implementations that have limited impact on individuals' well-being (7). Countries need to develop a vision and a strategy to guide selection of appropriate digital health technologies, that are relevant to their health priorities. This would lead to an implementation plan that better suits their context, and more sustainable commitment and impact (6,8,9,10).

WHO is expanding its efforts to support countries in engaging stakeholders and coordinating the the core components of digital health (including leadership and governance, capital investment, services and applications, standards and interoperability, infrastructure, legislations and compliance, workforce) required for sustainable implementation to enhance health systems' capabilities in provision of equitable and efficient health services (6,9,10,11). Using digital health in support of healthcare delivery and health systems has been discussed in several WHO/EMR ministerial meetings (12–15), most recently

during a pre-Regional Committee (RC) 68th session titled: "Is the Eastern Mediterranean Region ready for digitalizing health? Implications from Global Strategy on Digital health (2020–2025)" (16). The focus was on adaptation of the global strategy (adopted globally in the 71st World Health Assembly in 2018) to the regional needs and context (6,16). The Be He@lthy, Be Mobile (BHBM) is a global mobile health (mHealth) initiative, led by the World Health Organization (WHO) and International Telecommunication Union (ITU), to assist governments in using mobile technology to address priority health topics and reinforce existing national health activities to prevent, manage and treat health conditions and diseases (11). The BHBM platform has been used to deliver reliable information to tens of millions of people through SMS messages and mobile applications, for health promotion, disease prevention, management, and preventing complications.

The COVID-19 pandemic is probably the first in human history in which innovative digital technologies and social media are being used on an unprecedented scale to keep people connected, safe and productive, while being physically and socially apart (17). This has been witnessed in using digital technologies in all phases of pandemic response, including surveillance, prevention & promotion, screening, diagnostics, therapeutics, follow up, communication and community engagement (11). Such applications were observed in the fields of telemedicine including online consultations, referrals to diagnostics and inpatient care, and management; mobile applications: used for diagnosing and managing patients (e-MCH; e-NCDs); telehealth applications: used for teaching, diagnosis, management, follow-up; e-Census; digital contact tracing; home delivery of medicines especially for NCDs, just to name a few examples from most if not all countries of the EMR, regardless of their economic or logistic resources. In fact, digital health and telemedicine modalities were adopted during the COVID-19 pandemic to ensure the continuity of services to People Living with NCDs (PLWNDs) and minimize their exposure to the infection while visiting health

facilities. Remote care for hypertensive and diabetic patients during the COVID-19 pandemic, via telemedicine services, was shown to be very successful in several EMR countries including IR of Iran, Jordan, Oman, Qatar, Saudi Arabia, Sudan, UAE among others (17).

Nevertheless, the region is a good example of what is referred to as the “digital divide”, which could be described as the “gap which exists between people who have access to modern information and communication technology and those who lack such access”; including gender gap, geographical gaps, and gaps related to other determinants such as education, income, residence (urban / rural / remote / settlements) and digital literacy (18). Such divide is also reflected by great discrepancies between national resources available to other different countries of the region. Several countries are affected by scarcity or fragmentation of digital health and

innovation infrastructures or suffer from challenges in interoperability and connectivity, and inadequacy of trained and capable human resources to enable digital health infrastructure, and health care workers that are adequately trained to use them. However, the pandemic presented many opportunities to accelerate use of digital technologies in countries. WHO can support countries in their efforts to strengthen digital platforms, and strengthen collaboration with other key players such as the International Telecommunication Union (ITU) and other stakeholders. Moreover, digital solutions should ensure ethically sound policies that will protect populations from the potential adverse impact of the inappropriate use of technologies, and enhance governance capacities so that countries ensure that expansion of digital health will contribute to the enhancement of population health in an efficient and equitable manner (6).

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