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Suitability of two WHO research and development initiatives for COVID-19 to promote equitable innovation: the Access to COVID-19 Tools Accelerator and COVID-19 Technology Access Pool

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ABSTRACT

Objectives. To analyze the World Health Organization's (WHO's) contribution to promotion of access to innovative technologies by assessing its initiatives on coronavirus disease 2019 (COVID-19) research, development, and innovation.

Methods. A document search was done for previous criteria used by WHO working groups to evaluate innovation and access merits. Two sets of criteria were identified. One set was used to assess the suitability of existing mechanisms to coordinate research, development, and innovation and pool funds globally. The second set was used to measure success in implementing demonstration projects and consider the extent of innovative components being implemented by them. These criteria were applied to the COVID-19 Technology Access Pool (C-TAP) and Access to COVID-19 Tools Accelerator (ACT-A) initiatives. Scores were classified as: meets the criteria (2); partially meets the criteria (1); does not meet the criteria (0).

Results. Both initiatives met all the first set of criteria. C-TAP, an initiative based on a patent pool and other open knowledge approaches, best met the second set of criteria, scoring 7 out of 12 points. ACT-A, based on pooled funds, advanced purchase agreements, and voluntary contributions, met none of the second set of criteria.

Conclusions. Equitable access to health technologies has been a recurring problem in recent pandemics and initiatives were proposed to prevent it. However, even though COVID-19 has been the greatest health crisis in the 21st century, market dynamics still prevailed. Income disparities between countries and lack of support for solidarity and a global health approach only aggravated the negative health and economic impacts.

Keywords Access to health technologies; equity; global health; COVID-19; World Health Organization.

The coronavirus disease 2019 (COVID-19) pandemic is one of the deadliest ever registered and the greatest public health crisis in the 21st century (1, 2). Apart from health, the economic impact of the interruption of transport and commerce due to social distancing countermeasures had a devastating effect around the globe, which will be felt for many years.

Nonetheless, this disruptive pandemic is like previous health crises regarding access to health technologies. First, because in the beginning, tests, medicines, and vaccines targeting the new coronavirus were not available, a situation arose similar to that of some neglected diseases for which there are no proper therapeutic or diagnostics options.

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After these technologies where developed, there was a problem of scaling up to meet the global demand and provide equitable access. High-income populations had access to vaccines and other health technologies much earlier than others, because the traditional market dynamic of supply and demand was the main driver for allocation of such products, even though the World Health Organization (WHO) and partners tried to implement initiatives based on equity. The same scenario happened in other pandemics, such as HIV/AIDS, in which lower income countries had to struggle to access the available lifesaving medicines. Similarly, in the H1N1 pandemic in 2009, rich countries bought most of the global supply of available vaccines, leaving insufficient quantities for the other countries, many of which were among the most affected in the world (3). During the COVID-19 pandemic, some vaccine-producing countries even prevented doses of locally manufactured vaccines from being exported to other countries (4).

Innovation and access issues have been discussed in World Health Assemblies (WHAs) for nearly the past 2 decades. The last working group to research the matter was the Consultative Expert Working Group on Research and Development: Financing and Coordination (CEWG). Established in 2010, in line with the global strategy and plan of action on public health, innovation and intellectual property, the goal of the CEWG was to examine current financing and coordination of research and development, as well as proposals for new and innovative sources of financing to stimulate research and development related to the needs of developing countries (5).

The CEWG's report to the 65th WHA in 2012 detailed the evaluation of different funding mechanisms and listed several recommendations to be followed by WHO and its Member States. One of the recommendations was for WHO to encourage follow-up measures to implement the recommendations. For example, in 2013, the WHA requested WHO's Director-General to facilitate the implementation of a number of health research and development demonstration projects to address identified gaps that disproportionately affect developing countries.

In this process of political and technical discussion, the issue of research, development, and innovation has been analyzed in depth, and several tools and frameworks have been created to evaluate projects and initiatives as to their potential for not only fostering these activities but also for promoting equitable access to the resulting technologies. This study aimed to assess WHO's initiatives for COVID-19 research, development, and innovation in light of CEWG recommendations and derived measures, and its contributions to the promotion of access to innovative technologies.

METHODS

A document search was conducted in WHO's official website for material that directly mentioned the CEWG and described its work, including implementation, activities, reports, and the follow-up measures adopted after the group's recommendations. From 2010 to 2017, 18 reports and resolutions, both from the Executive Board and the WHA, were identified (Table 1). Information on WHO's website about the CEWG or any follow-up measure were also considered.

In the retrieved documents, two sets of criteria were identified. One set, from EB 134/26, was used to assess the suitability of existing mechanisms to coordinate research, development, and innovation and pool funds globally (6). The second set, from WHA A68/34 Add.1, was indicators to measure success in implementing the demonstration projects and consider the extent of innovative components being implemented by them. We have called them the initial and expanded criteria, respectively (Table 2).

TABLE 1. WHO documents referring to the WHO Consultative Expert Working Group on Research and Development: Financing and Coordination

Year	Document
2010	WHA63.28
2012	WHA65.22
2013	A66/23
2013	WHA66.22
2013	WHA66(12)
2014	EB134(5)
2014	EB134/26
2014	EB134/27
2014	A67.27
2014	A67.28
2014	WHA67(15)
2015	A68.34
2015	A68.34 Add.1
2016	EB 140/21
2016	EB140/22
2016	A69.40
2016	WHA69.23
2017	A70.22

WHO, World Health Organization.
Source: Prepared by the authors.

These criteria were then applied to WHO's initiatives for research, development, and innovation for COVID-19. We used numerical grades to score the initiatives against each criterion: grade 2 when the criterion was met, 1 when the criterion was partially met, and 0 when the initiative did not meet the criterion. The scoring was later validated by other members of the research team and invited public health and innovation specialists.

WHO's initiatives on research, development, and innovation for COVID-19 aimed to accelerate the process of developing technologies to respond to the pandemic by coordinating activities, establishing standards, and fund-raising. Solidarity from all countries was considered essential to guarantee equitable access to the products generated and it was a central point of political discussions.

Five initiatives were identified: (i) R&D Blueprint; (ii) Solidarity trial; (iii) Access to COVID-19 Tools Accelerator (ACT-A); (iv) COVID-19 Technology Access Pool (C-TAP); and (v) Solidarity Response Fund.

The R&D Blueprint and the Solidarity Trial focus on technical coordination of scientific activities, not funding and access promotion. The Solidarity Response Fund is mostly for WHO's immediate field response. Only C-TAP and ACT-A have a core nature of financing research, development, and innovation and promoting access to technologies; therefore they were the initiatives considered for this analysis.

TABLE 2. Evaluation criteria/indicators adopted from the recommendations of the WHO Consultative Expert Working Group on Research and Development: Financing and Coordination

Criteria	Description
Initial criteria	
Adaptability	Can the mechanism be easily adapted to take up the global funding of health research and development? One consideration would be whether this would require a long process, such as ratification of an amendment to an international treaty.
Scope of research	Does the scope of the mechanism already encompass diseases that disproportionately affect developing countries? What technologies (medicines, vaccines, medical devices) are researched or procured to address these diseases?
Geographical scope	Is the mechanism geographically limited regarding its activities and if so, to what extent (for example, focused on one region or a limited set of countries)?
Inclusive governance structure	Does the main governing body include relevant stakeholders?
Experience in funding research and development	Does the mechanism have proven experience in financing research projects, including the identification of areas of research and the allocation and monitoring of funding for external research projects?
Experience in managing research and development	Does the mechanism have proven experience in managing research projects?
Transparency	Are the criteria used to distribute funding and the minutes of governing body meetings publicly available?
Expandend criteria	
Delinkage	The project clearly delinks the cost of research from the price of the product.
Open knowledge approaches	The project generates knowledge that is free to use without legal or contractual restrictions and that utilizes open approaches to R,D&I (including precompetitive research and development platforms, open-source and open-access schemes).
Licensing for access	The project uses licensing agreements or other instruments to ensure that the population in need has access to and can afford any new products.
Financing	The project uses pooled funds, milestone prizes and other innovative financing mechanisms (including taxes) or sources of funds (such as those from developing countries, disease-endemic countries or the emerging economies).
Coordination	The project links data and information coming from multiple sources and/or engages with a diversified array of partners, particularly in developing and disease-endemic countries. The project involves institutions spanning multiple countries and regions.
Capacity-building and technology transfer	The project builds capacity in developing and disease-endemic countries. The project uses transfer of technologies as a means to increase capacity in developing and disease-endemic countries.

WHO, World Health Organization; R,D&I, research development, and innovation.
Source: Prepared by the author based on EB134/26 and WHA A68/34 Add.1.

RESULTS

C-TAP

C-TAP is a voluntary pool of intellectual property, clinical and regulatory data, know-how and other types of knowledge for the development and production of technologies for the detection, prevention, control, and treatment of COVID-19. Launched in May 2020, its goal is to accelerate the development of these technologies and their availability by mobilizing additional production capacity and removing barriers to access through non-exclusive licensing and technology transfer to boost local production of generic drugs, particularly by middle- and low-income countries (7).

The pool operates through consolidation of existing mechanisms whose performance has been expanded to COVID-19, for which C-TAP serves as a coordinating platform.

As C-TAP is a voluntary initiative, it depends on the commitment of the players in the pharmaceutical innovation system. In May 2021, C-TAP was supported by 40 countries, other organizations in the United Nations system, nongovernmental organizations, and individuals.

The United States, the European Union, United Kingdom of Great Britain and Northern Ireland, and Japan were not listed among the supporters. In addition, pharmaceutical companies producing vaccines against COVID-19, such as Pfizer and Moderna, also refused to participate. AstraZeneca, which developed a vaccine together with the University of Oxford, opted for bilateral technology transfer agreements, such as with the Oswaldo Cruz Foundation (Fiocruz) or the Serum Institute of India.

In November 2021, C-TAP announced its first licensing agreement with the Spanish National Research Council for a COVID-19 serological antibody test (8). In May 2022, two licensing agreements were signed with the United States National Institutes of Health for the development of 11 innovative therapeutics, early-stage vaccines and diagnostic tools for COVID-19 (9).

ACT-A

ACT-A was launched in April 2020 as a time-limited global collaboration designed to rapidly utilize existing global public health infrastructure and expertise to accelerate the development and production of and equitable access to COVID-19 tests, treatments, and vaccines. It was intended to be a multilateral response to shorten the time to the end of the pandemic, and it involved global health organizations, foundations, civil society, academia, and the private sector (10, 11).

ACT-A has three main pillars – diagnostics, treatments, and vaccines (named COVAX) – and a connecting pillar of health systems strengthening. ACT-A is a collaborative and coordinated effort, not a legally formalized new organization or

decision-making body. In practice, it is an umbrella-type initiative and each pillar is managed jointly and independently by partner agencies. Coordination mechanisms were established to facilitate joint work between the participants and WHO leadership. The main form of funding is through donations from governments, the private sector, philanthropic institutions, and multilateral organizations, but it also includes an advanced market commitment arrangement, the COVAX facility.

By April 2022, ACT-A had received total funding of US$ 20.5 billion, of which 66% had been allocated to the vaccines pillar. Public donors contributed 90% of the funds, and private and multilateral donors 5% each. The initiative still lacked most of the funding for 2021–2022, as there was an 89% funding gap (12).

Assessment of the initiatives

Considering the CEWG report and follow-up measures, it is possible to classify and evaluate C-TAP and ACT-A. C-TAP is based on open approaches to research, development, and innovation and patent pools, which CEWG considers to be aligned with its objectives. The same is true for ACT-A's pooled fund mechanism; however, the mechanism for purchase or procurement agreements did not meet CEWG objectives. In addition, CEWG considers that voluntary contributions from businesses and consumers are not a sustainable source of funding.

To gain a deeper understanding, Table 3 shows the results of the evaluation of WHO's initiatives for COVID-19 focused on research, development, and innovation against each CEWG criterion.

TABLE 3. Analysis of COVID-19 R,D&I initiatives according to criteria adopted from the recommendations of the WHO Consultative Expert Working Group on Research and Development: Financing and Coordination

Criteria	C-TAP	ACT-A
Initial criteria		
Adaptability	The mechanism is based on existing structures, which have been adapted to COVID-19. [2]	The mechanism is based on existing structures, which have been adapted to COVID-19. [2]
Scope of research	It encompasses several types of technologies, such as vaccines, treatments and diagnostics. [2]	It encompasses several types of technologies, such as vaccines, treatments and diagnostics. [2]
Geographical scope	Global scope. Even though its main focus is to improve access for developing countries, developed countries can also benefit from its use. [2]	Global scope. Even though its main focus is to improve access for developing countries, developed countries can also benefit from its use. [2]
Inclusive governance structure	Despite having a shared governance mechanism, it is focused on United Nations institutions or on private actors. Organized civil society does not have direct participation in governance bodies. [1]	Despite having a shared governance mechanism, it is focused on United Nations institutions or on private actors. Organized civil society does not have direct participation in governance bodies. [1]
Experience in funding research and development	The agencies involved have experience in financing R,D&I and in conducting activities with a similar scope to this initiative. [2]	The agencies involved have experience in financing R,D&I and in conducting activities with a similar scope to this initiative. [2]
Experience in managing research and development	The agencies involved have experience in managing R,D&I and in conducting activities with a similar scope to this initiative. [2]	The agencies involved have experience in managing R,D&I and in conducting activities with a similar scope to this initiative. [2]
Transparency	There are several materials with relevant information available on a freely accessible website. [2]	There are several materials with relevant information available on a freely accessible website. [2]
Total score	13	13
Expanded criteria		
Delinkage	There is no provision for decoupling the price from the R,D&I cost. [0]	There is no provision for decoupling the price from the R,D&I cost. [0]
Open knowledge approaches	A collaborative approach based on open knowledge is the premise of this initiative. [2]	It does not provide for open knowledge approaches. [0]
Licensing for access	Licensing aimed at access to medicines is a premise of this initiative.[2]	It does not provide for licensing of the supported technologies. [0]
Financing	It does not provide for funding mechanisms, only knowledge sharing, open licensing and technology transfer to generic producers. The financing of the initiative itself is through traditional means, in the same way as the structures that compose it. [0]	The financing of purchased products is done in a traditional way, with the difference that they are shared purchases or via advanced market commitment. The structure itself is financed through voluntary donations. [0]
Coordination	Governance is relatively straightforward, comprising a steering committee chaired by WHO, a technical group and a country working group. Civil society does not participate directly in governance bodies. [1]	Governance is complex and fragmented. It includes the participation of private actors, and organized civil society does not participate directly in governance structures. [0]
Capacity-building and technology transfer	It favors capacity-building by encouraging technology transfer for generic products. [2]	It does not favor technology transfer and capacity-building in other players or countries.[0]
Total score	7	0

COVID-19, coronavirus disease 2019; R,D&I, Research, development and Innovation; WHO, World Health Organization; C-TAP, COVID-19 Technology Access Pool; ACT-A, Access to COVID-19 Tools Accelerator.
Note: The square brackets indicate the scores assigned by the authors.
Source: Prepared by the authors from their analysis.

Both C-TAP and ACT-A scored well in the initial criteria, with 11 points out of a total of 14 points. However, with the expanded criteria, the ACT-A performed poorly (score 0). C-TAP performed better, scoring 7 points out of a total of 12 points. The two initiatives differ in the criteria of: open knowledge approaches; licensing for access, coordination and capacity building; and technology transfer. Overall, ACT-A does not implement CEWG recommendations, unlike C-TAP, which, even with limitations, does so more broadly.

DISCUSSION

The COVID-19 pandemic occurred after CEWG discussions and therefore can be evaluated in light of this group's recommendations and WHA resolutions and documents on the matter. Due to the magnitude of the pandemic and the importance of innovative technologies to help manage both the health and economic crisis, this pandemic is a rare example of a huge and global demand. It tested the capacity for pharmaceutical innovation and integration of the actors involved in this process, as well as WHO's leadership and steering role.

WHO's role in the analyzed initiatives is of oversight and secretarial support. Despite being its co-host, its coordination ability is limited, as it is shared with or delegated to partners. However, the importance of the organization's participation cannot be diminished. One of its benefits is the promotion of transparency and accountability, which is verified through documents that detail organizational structure and activities, and monitoring of reports and data platforms, all freely available to the public on the organization's website.

Nonetheless, like WHO's own funding mechanism, this governance structure allows for the influence of dominant actors and the orientation of resources according to their interests. Due to the decrease in the volume of regular contributions from Member States, whose allocation decision is made multilaterally at the WHA, over the years, the organization has come to increasingly depend on voluntary contributions. These contributions come mostly from private institutions in high-income countries (companies or philanthropic organizations), which are allocated to the donors' specific lines of interest. Thus, WHO dependence on external contributions allows for private donors to dictate the organization's priorities and action agenda (13, 14).

C-TAP and ACT-A should be complementary initiatives. For example, data, know-how, and intellectual property associated with technologies prioritized by ACT-A could be shared via C-TAP (15). Although WHO co-hosts both, the relationship between the two initiatives is not formalized and they operate separately; so, in practice, they are a fragmented effort.

The multilateral approach proposed by WHO's initiatives opposes the bilateral strategy adopted by some countries of guaranteeing inputs and vaccines for their populations first, through direct agreement with producers. WHO proposed this approach in an attempt to avoid repeating the access inequality experienced in previous pandemics.

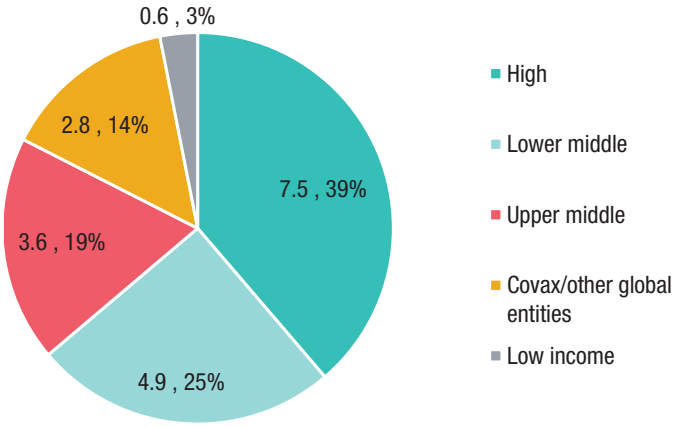
Access to COVID-19 countermeasure technologies is an example of the asymmetry between high-income and lower-income countries, and the importance of funding for public policies. Taking vaccines as an example, which are a core technology to fight the pandemic and a high value product due to the technological complexity of developing and producing them, the dominance of rich countries is clear, as shown in Figure 1. Even though high-income countries have 16% of the world's population (16), they have bought 39% of the available vaccines doses, in some cases more than seven times their number of inhabitants (17).

The COVAX facility, the vaccine pillar of ACT-A, was initially designed as an equitable global mechanism for the purchase of vaccines. Its premise was that vaccination should happen in stages according to priority groups and therefore all countries should receive sufficient doses to vaccinate 20% of their population; thereafter, doses would be allocated internationally as needed (18, 19).

However, high-income countries did not procure vaccines through COVAX and chose to guarantee doses on a bilateral basis with manufacturers so they could fully vaccinate their populations long before priority groups were vaccinated in other countries. This undermined the mechanism and as more countries purchase doses directly, concerns about the reliability of supply from the COVAX facility increased, creating incentives for countries to purchase doses on their own, thus fueling a negative cycle (18, 19).

As this situation had already happened before, this approach used by high-income countries was expected. However, initially, when the vaccines were still in development and had not been approved by regulatory agencies, it was thought that COVAX would offer a safeguard to these countries because, if any of the projects they had invested in failed, they would have secured doses from COVAX. However, most of the vaccine candidates included in the scope of the bilateral agreements were successfully developed and they immediately became unavailable on the market as the doses were already contracted. This exacerbated the lack of doses to be delivered via COVAX. After the launch of COVAX, to increase its attractiveness to high-income countries, several adaptations were made to the initial design of the mechanism, which undermined the equal treatment for all countries and the equal product allocation. For example, a category of purchases for self-financing countries was introduced, which gave them the possibility to opt or not

FIGURE 1. COVID-19 vaccine doses purchased by country income level (total doses in billions, corresponding percentage), April 1 2022



COVID-19, coronavirus disease 2019.
Source: Prepared by the authors based on public information from Duke University (16).

for certain products; basically, giving them more choice about which vaccines they would get. Later, the dose purchase limit for 20% of a country's population was increased to 50% (18).

The initial objective of the COVAX facility, namely for vaccination to occur uniformly for priority groups and equitably across the world, was not achieved. In the end, the initiative helped lower-income countries to procure doses at lower prices and thus launch their vaccination campaigns earlier than they would have done without outside help. In addition, at a given moment, the mechanism's managers found themselves in a difficult situation. They were contractually obligated to supply doses to countries that had already vaccinated a much higher percentage of their population than other countries that had received few doses. By the end of May 2021, 20% of the doses purchased by COVAX had been distributed to high-income countries (18–20). Thus, despite WHO's efforts and political positions for global solidarity, the purchase of vaccines was again dominated by high-income countries.

The division between donor and recipient countries is also evidence of the income asymmetry. Donor countries have a privileged position in power dynamics; they can influence the conditions placed on their participation, in addition to benefiting their own national organizations. Recipient countries have less voice in the design and governance of these mechanisms, and they continue to demand deeper structural changes in the system, such as greater autonomy, technology transfer and the construction of local production capacity (21).

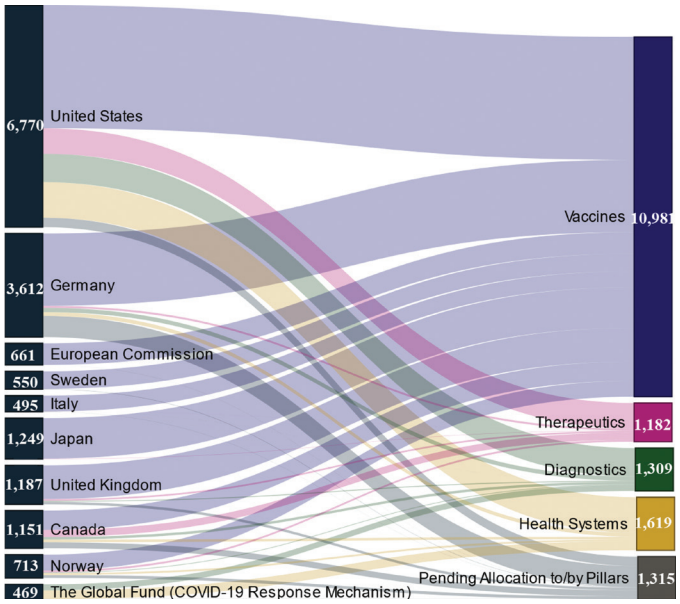
The financing of the ACT-A reflects this problem. The pillar with the best funding is vaccines. It is undeniable that the immunization strategy was central to containing the pandemic. Nonetheless, it is based on the acquisition of high-technology products, owned by multinational pharmaceutical companies based in countries that dominate the pharmaceutical industry. In this sense, Figure 2, which correlates donors and the destination of their resources, shows that the dominant countries direct their resources towards action that favors their national industry. Despite participating in a mechanism that has as a principle of global solidarity and access by lower-income countries, this mechanism to some degree favors the donors themselves, by returning revenue to their industries.

The recurrent problem of access to innovative technologies indicates that it is a structural problem. Health technologies are a public health asset and should be treated as such, but their development, production, and distribution are oriented by traditional market mechanisms. This fundamental problem is reflected in the existing mechanisms to improve innovation and access; mostly they do not propose radical changes to the market dynamics, such as, for example, changes in the intellectual property system.

Considering the analyzed initiatives, C-TAP is an initiative that proposes an innovative approach to intellectual property, aiming to reduce its impact as an access barrier. On the other hand, ACT-A does not address this issue and is based on traditional intellectual property protection and management, and usual market mechanisms. The fact that the bolder initiative on intellectual property has been less successful in garnering support indicates that, even in an unprecedented global crisis, public health issues are not prioritized over market dynamics.

This is also demonstrated by the resistance of high-income countries to adopt a waiver on pharmaceutical patents – i.e., a temporary suspension of intellectual property rights on

FIGURE 2. Top 10 ACT-A donors and destination of the donation by ACT-A pillar, April 1 2022



ACT-A, Access to COVID-19 Tools Accelerator; COVID-19, coronavirus disease 2019.
Source: Prepared by authors, with public available information from the ACT Accelerator funding tracker (22).

essential medicines and medical products to combat COVID-19 – in the World Trade Organization. Initially proposed by India and South Africa, it was opposed by the European Union, the United Kingdom, Canada, and Norway. The United States, in May 2021, expressed a position in favor of the waiver. These countries argue that the flexibilities that already exist in the Trade-Related Aspects of Intellectual Property Rights (TRIPS) are sufficient (22). Nonetheless, practice shows that existing flexibilities are not enough to deal with the chronic inequity of access to health technologies, since such access is caused by a structural monopoly of power of dominant agents, either countries or companies (23), whose modus operandi has not changed, and companies are reaping great profits from the pandemic (21). The proposal to temporarily suspend intellectual property rights on essential health technologies for COVID-19 has been struggling to gain traction and is far from being implemented (20).

It is important to consider that unprecedented amounts of public resources were invested in COVID-19 research, development, and innovation projects, especially for vaccines. However, funding countries, which could have taken action to promote access, such as requirements about affordable pricing, technology transfer and even supply to highly vulnerable countries by, for example, adherence to the COVAX facility or other shared mechanisms, did not take such steps and favored their private industry and nationalism.

WHO's COVID-19 initiatives on research, development, and innovation and access were built on existing programs. This is understandable given the need for an immediate response in a moment of crisis; it is easier to adapt existing structures than go through the time- and resource-consuming process of creating new ones. On the other hand, this model carries the same limitations as the structures on which it is based. Instead of

moving towards significant change, some proposed solutions, such as the ACT-A, intrinsically have the conditions that allow the scarcity and rationing of products and the inequity in their distribution and access (21).

The COVID-19 pandemic put WHO's leading role in global health governance and its ability to implement WHA's decisions and recommendations in the spotlight. The pandemic arrived at a time of questioning of WHO's role and requests for reform. The access asymmetry between countries shows that global governance based on solidarity does not exist.

The main limitation of this study is that the COVID-19 pandemic is ongoing. As the analysis was concluded in April 2022, only results and information published until this date were considered. In addition, the criteria used had been proposed in a different context and were adapted to COVID-19.

Nonetheless, this is a unique opportunity to monitor a contemporary subject and contribute to the discussions related to it. In addition, it is important to consider the continuity of public policies and the implementation of recommendations that are multilaterally discussed and agreed at the WHA, and this article tries to contribute to the improvement of such policies as it extends the work done by the CEWG to a contemporary challenge. This is important especially as access is a recurring structural problem that burdens mostly the most vulnerable populations.

In conclusion, given the CEWG's recommendations, C-TAP, as it is based on open innovation approaches and capacity-building, is the initiative that better implements innovative funding mechanism for research, development, and innovation and access promotion. ACT-A, based on market approaches and traditional intellectual property protection, meets such recommendations less well.

As a recommendation, if C-TAP or ACT-A are to be a reference for a new pandemic prevention, preparedness, and response treaty, or permanent initiatives, it is important to evaluate if they contribute to mitigating the structural problem of access to medicines and promote equality and solidarity between unequal countries. Innovation only truly contributes to the promotion of the human right to health if it is accessed by those who need it, regardless of income.

Author contributions. LPAS conceived the original idea, collected and analyzed the data, and wrote and reviewed the paper. MSR oriented the analysis and reviewed the paper. All authors reviewed and approved the final version.

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Idoneidad de dos iniciativas de la OMS de investigación y desarrollo sobre la COVID-19 para promover la innovación equitativa: Acelerador del Acceso a las Herramientas contra la COVID-19 y Acceso Mancomunado a las Tecnologías contra la COVID-19

RESUMEN

Objetivos. Analizar la contribución de la Organización Mundial de la Salud (OMS) a la promoción del acceso a tecnologías innovadoras mediante la evaluación de sus iniciativas de investigación, desarrollo e innovación sobre la enfermedad por coronavirus del 2019 (COVID-19).

Métodos. Se realizó una búsqueda de documentos de acuerdo con los criterios previamente utilizados por los grupos de trabajo de la OMS para evaluar méritos en cuanto a acceso e innovación. Se determinó que se usarían dos conjuntos de criterios: el primero para evaluar la idoneidad de los mecanismos existentes para coordinar la investigación, el desarrollo y la innovación y mancomunar fondos a nivel mundial; el segundo para medir el éxito en la ejecución de proyectos de demostración y valorar el alcance de los componentes innovadores que se están poniendo en marcha. Estos criterios se aplicaron a las iniciativas Acceso Mancomunado a las Tecnologías contra la COVID-19 (C-TAP) y Acelerador del Acceso a las Herramientas contra la COVID-19 (Acelerador ACT). Se asignaron las siguientes puntuaciones: cumple con los criterios (2); cumple parcialmente con los criterios (1); no cumple con los criterios (0).

Resultados. Ambas iniciativas cumplieron con el primer conjunto de criterios en su totalidad. El C-TAP, una iniciativa basada en un consorcio de patentes y otros enfoques de conocimiento abierto, obtuvo la mejor clasificación en el segundo conjunto de criterios, con una puntuación de 7 sobre 12 puntos. El Acelerador ACT, basado en fondos mancomunados, acuerdos de compra anticipada y contribuciones voluntarias, no reunió ninguno de los criterios del segundo conjunto.

Conclusiones. El acceso equitativo a las tecnologías sanitarias ha sido un problema recurrente en las pandemias recientes; se propusieron distintas iniciativas para prevenirlo. Sin embargo, a pesar de que la COVID-19 ha supuesto la mayor crisis de salud en el siglo XXI, la dinámica del mercado ha prevalecido. Las disparidades de ingresos entre los países y la falta de solidaridad y de un enfoque mundial de salud solo agravaron las repercusiones negativas a nivel económico y de salud.

Palabras clave Acceso a tecnologías sanitarias; equidad; salud global; COVID-19; Organización Mundial de la Salud.

Adequação de duas iniciativas de pesquisa e desenvolvimento da OMS para COVID-19 destinadas a promover a inovação equitativa: o Acelerador de Acesso a Ferramentas contra a COVID-19 e o Grupo de Acesso às Tecnologias contra a COVID-19

RESUMO

Objetivos. Analisar a contribuição da Organização Mundial de Saúde (OMS) promover o acesso a tecnologias inovadoras mediante avaliação de suas iniciativas de pesquisa, desenvolvimento e inovação para a doença por coronavírus 2019 (COVID-19).

Métodos. Realizou-se uma pesquisa documental dos critérios anteriores usados por grupos de trabalho da OMS para avaliar os méritos de inovação e acesso. Identificaram-se dois grupos de critérios. Um deles foi usado para avaliar a adequação dos mecanismos existentes para coordenar a pesquisa, o desenvolvimento e a inovação e reunir fundos mundialmente. O segundo grupo foi usado para medir o sucesso na implementação de projetos de demonstração e avaliar a envergadura dos componentes inovadores implementados por eles. Esses critérios foram aplicados às iniciativas Grupo de Acesso às Tecnologias contra a COVID-19 (C-TAP, na sigla em inglês) e Acelerador de Acesso a Ferramentas contra a COVID-19 (ACT-A, na sigla em inglês). A pontuação foi atribuída da seguinte maneira: cumpre os critérios (2); cumpre parcialmente os critérios (1); não cumpre os critérios (0).

Resultados. As duas iniciativas cumpriram todos os critérios do primeiro grupo. O C-TAP, uma iniciativa com base em um consórcio de patentes e outras estratégias de conhecimento aberto, cumpriu melhor o segundo grupo de critérios, alcançando 7 de 12 pontos. O ACT-A, com base em fundos conjuntos, contratos de compra antecipada e contribuições voluntárias, não cumpriu nenhum critério do segundo grupo.

Conclusões. O acesso equitativo às tecnologias de saúde foi um problema recorrente nas pandemias recentes e foram propostas iniciativas para evitar esse problema. Entretanto, embora a COVID-19 tenha sido a maior crise de saúde do século XXI, ainda prevaleceu a dinâmica de mercado. As disparidades de renda entre os países e a falta de apoio à solidariedade e a uma estratégia de saúde global só agravaram os impactos negativos na saúde e na economia.

Palavras-chave Acesso a tecnologias em saúde; equidade; saúde global; COVID-19; Organização Mundial da Saúde.