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A global comparative analysis of the the inclusion of priority setting in national COVID-19 pandemic plans: A reflection on the methods and the accessibility of the plans

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ABSTRACT

Background: Despite the swift governments' response to the COVID-19 pandemic, there remains a paucity of literature assessing the degree to which; priority setting (PS) was included in the pandemic plans and the pandemic plans were publicly accessible.
This paper reflects on the methods employed in a global comparative analysis of the degree to which countries integrated PS into their COVID-19 pandemic plans based on Kapiriri & Martin's framework. We also assessed if the accessibility of the plans was related to the country's transparency index.
Methods: Through a three stage search strategy, we accessed and reviewed 86 national COVID-19 pandemic plans (and 11 Canadian provinces and territories). Secondary analysis assessed any alignment between the readily accessible plans and the country's transparency index.
Results and conclusion: 71 national plans were readily accessible while 43 were not. There were no systematic differences between the countries whose plans were readily available and those whose plans were 'missing'. However, most of the countries with 'missing' plans tended to have a low transparency index. The framework was adapted to the pandemic context by adding a parameter on the need to plan for continuity of priority routine services. While document review may be the most feasible and appropriate approach to conducting policy analysis during health emergencies, interviews and follow up document review would assess policy implementation.

1. Background

Healthcare priority setting (PS) is one of the leading challenges faced by policy makers globally due to the persisting gap between the population health needs/ demands and the available resources [1,2]. The PS challenges are exacerbated by health emergencies such as the COVID-19 pandemic which acutely increase the demand and competition for the often finite health resources. Within such contexts, systematic priority setting and transparency can contribute to more equitable, robust, evidence-based, accountable, fairer and legitimate decisions [1,2].

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Examining the documented countries' approaches to PS during the COVID-19 pandemic can provide crucial information which can be used when planning for future public health emergencies. While disconnections between the documented policy aspirations and their implementation are well documented [3,4], examining documented public policy aspirations and assessing their accessibility, is an important initial step as we seek to understand the substance and process of policy formulation [5]. There remains a paucity of literature assessing the degree to which the policies developed during the pandemic (which included priority setting), were publicly accessible.

Health care priority setting (PS) involves making decisions about the allocation of resources between the competing claims of different programs, services, or different patient groups [6]. PS can be either informal and ad hoc or systematic. Systematic PS is often guided by explicit approaches/frameworks such as program budgeting & marginal analysis (PBMA), the burden of disease & cost-effectiveness analyses (BOD/-CEA), the Multi-Criteria Decision Analysis (MCDA), and procedural justice approaches such as Accountability for Reasonableness (A4R) or a combination of these approaches [6–9]. Although systematic priority setting is well established within health care systems during 'normal times', there is relatively limited literature on priority setting during health emergencies [10,11]. During the COVID-19 pandemic, policy makers had to make swift and difficult decisions about which interventions and population groups to prioritize, including for ventilators, personal protective equipment (PPE) and therapeutics [12,13]. These decisions were made under high levels of uncertainty, public scrutiny and urgency. Assessing if and how systematic priority setting was included in the COVID-19 pandemic planning and preparedness documents is an indicator of the extent of stakeholders' commitment to implementing systematic PS and therefore, a first step in understanding the degree to which systematic PS may have been implemented during the pandemic.

Furthermore, since transparency emerged as key to garnering public confidence and compliance during the COVID-19 pandemic [14,15]; it is important to assess the degree to which governments were transparent about their priority setting plans. Transparency about policy decisions is a known best practice and a recommended strategy for reducing corruption [16], which has been typically associated with democratic political systems [17]. While there are several definitions of transparency in the literature, we adapted the Transparency project's definition; **"…** *the availability and accessibility (free of cost) of public information required to deter corruption and enable public accountability in a society…"* According to this definition reliable and relevant information about government activities should be availed to the public in a timely manner [13].

This paper reflects on the methods employed in a multi-country that aimed to assess the degree to which different countries explicitly integrated parameters of high-quality priority setting into their COVID-19 pandemic planning documents. It also examines the degree to which the plans were accessible, and if this was associated with the country's political regime and transparency index. The paper concludes with a reflection on the key lessons learnt about conducting policy analyses during a pandemic.

2. Description of the methods

Study approach: This study was based on a review of COVID-19 pandemic plans from a sample of 86 countries from each of the six WHO regions.

The Analytical framework: A framework for assessing effective PS was used to assess the degree to which national plans included systematic PS. Several frameworks for assessing the effectiveness/ quality/ success of the PS have been discussed in the literature. These frameworks identify criteria and parameters of high quality/ effective PS, among which is the use of an explicit framework, criteria, evidence e.t.c. [3,18,19].

This study used Kapiriri & Martin's (2017) effective PS framework [12] to identify which aspects of priority setting were included in the retrieved documents. The parameters in this framework were identified from pre-existing frameworks for assessing the effectiveness/ quality of PS and interviews with international PS experts. The framework was validated by health care PS experts at the global and national levels [20]; then used in assessing the effectiveness of PS at the global level and in a low-income country across five health programs- including Maternal and child health [21], Health emergencies [22], New technologies [23], Non- communicable diseases [24], and HIV/AIDS [25]. The framework comprises five domains namely: the PS context, the pre-requisites, the PS process, implementation of the priorities and Outcome and impact. Each domain has 3- 12 parameters of effective PS.

Adapting the framework: The framework was discussed with members of a multidisciplinary global health research team with expertise in PS, health policy, ethics, and health systems research in diverse contexts. The discussion focused on assessing the degree to which the parameters were robust enough to guide the abstracting of information about PS from the COVID-19 plans. Each parameter was considered against two criteria (i) is the parameter relevant to the pandemic context and if it is, (ii) can it be operationalized to guide data collection. After considering all the parameters in the framework, the research team discussed if there were relevant parameters which could be added to the framework.

The research team recognized that effective priority setting during health emergencies should include a strategy for identifying and prioritizing the continuity of priority routine health programs. The literature discusses how sometimes more lives may be lost due to indirect consequences of health emergencies(e.g. through the diversion of human resources, finance and medical equipment and beds from routine programs to the pandemic), than those directly attributed to the pandemic [26]. Hence, "planning for continuity of priority routine services" was added to the parameters in the pre-requisite domain. All parameters were operationalized to support data extraction (Table 1).

Table 1. Adapted framework

Data: Data were collected using a rapid qualitative synthesis approach, with some descriptive numerical analysis [27] involving *pandemic plans* from a sample of 86 countries from all the six regions of the World Health Organization (WHO).

Sampling strategy for the countries: Purposive sampling was employed to select countries with diversity of characteristics that were relevant to the study objectives. *First,* the countries were stratified into WHO regional groupings. *Second,* since the aim was to conduct a comparative analysis of the role of PS in the COVID-19 pandemic plans, the sample represented a range of economic (low- and high-income countries), health systems (universal health coverage; public, public-private, and private), political regimes (democratic, non-democratic), countries' experience with systematic priority setting and disease outbreaks. Sampling focused on obtaining maximum variation (based on the above criteria) within each WHO region.

Document Search strategy: Three strategies were used to retrieve the COVID-19 plans. *First*, the national government ministries of health webpages were searched. The available documents on the webpages were scanned to assess if they included aspects of healthcare priority setting. *Second*, if a national plan was not accessed through their ministry of health webpage, Google and Google Scholar were used to identify any additional relevant official pandemic preparedness plans. *Third,* if national pandemic plans were referenced but could not be located online in the public domain, the entire research team (which represented researchers from Chile, Colombia, Zambia, Uganda, the United Kingdom, USA, Canada, Sweden) actively reached out to their contacts including those in the respective health ministries or in-country academic institutions for assistance in accessing the plans. We sent emails to the respective contacts, and a reminder after 2 weeks. When no response was obtained, we followed up with a phone call (where possible) after which the plans were labeled "missing". This label does

Table 1
Kapiriri & Martin's Framework for assessing the quality of priority setting.

Domain	Parameter	Short definition
Contextual Factors	Conducive Political, Economic, Epidemiological, Social and cultural context	[1] Relevant contextual factors that may impact priority setting
Pre-requisites	Political will	Degree to which the government manifested support to tackle the pandemic e.g. by assuming leadership in convening the COVID-19 response committees, supporting the development of the plans e.t. c.
	Resources	Availability of a budget in the COVID plan, and clear description of resources available or required (including human resources, ICU beds and equipment, PPE, and other resources)
	Legitimate and credible institutions	Degree to which the priority setting institutions can set priorities, public confidence in the institution
	Incentives for compliance	Explicit description of material and financial incentives to comply with the pandemic plan
The Priority setting process	Planning for continuity of care across the health systems	[2] Explicit mentions of the continuity of healthcare services during the pandemic
	Stakeholder participation	Description of stakeholders participating in the development and implementation of the COVID plan
	Use of clear priority setting process/tool/methods	Documented priority setting process and/or use of priority setting framework
	Use of explicit relevant priority setting criteria	Documented/articulated criteria for the priority setting in the COVID plan
	Use of evidence	Explicit mention of the use of evidence to understand the context, the epidemiological situation, or to identify and assess possible interventions to be implemented
	Reflection of public values	Explicit mention that the public is represented, or that public values have been considered for the development or implementation of the plan
	Publicity of priorities and criteria	Evidence that the plan and criteria for priority-setting have been publicized and documents are openly accessible
	Functional mechanisms for appealing the decision	Description of mechanisms for appealing decisions related to the COVID plan, or evidence that the plan has been revised
	Functional mechanisms for enforcement the decision	Description of mechanisms for enforcing decisions related to the COVID plan
	Efficiency of the priority-setting process	[3] Proportion of meeting time spent on priority setting; number of decisions made on time
	Decreased dissentions	[3] Number of complaints from Stakeholder
Implementation	Allocation of resources according to priorities	Degree of alignment of resource allocation and agreed upon priorities
	Decreased resource wastage / misallocation	[3] Proportion of budget unused, drug stock-outs
	Improved internal accountability/reduced corruption	Description of mechanisms for improving the internal accountability or reduce corruption
	Increased stakeholder understanding, satisfaction and compliance with the Priority setting process	[3] Number of SH attending meetings, number of complaints from stakeholder, % stakeholder that can articulate the concepts used in priority setting and appreciate the need for priority setting
	Strengthening of the PS institution	[3] Indicators relating to increased efficiency, use of data, quality of decisions and appropriate resource allocation,% stakeholders with the capacity to set priorities
	Impact on institutional goals and objectives	[3]% of institutional objectives met that are attributed to the priority setting process
Outcome/ Impact	Impact on swiftness of health policy and practice	Changes in health policy to reflect identified priorities, and swiftness of the pandemic response
	Impact on population health	Description of the expected impact of the COVID plan on the population health
	Impact on reducing inequalities	Description of the expected impact of the COVID plan on reducing inequalities
	Fair financial contribution	Description of the expected impact of the COVID plan on fair financial contributions
	Increased public confidence in the health sector	Description of the expected impact of the COVID plan for increasing public confidence in the response to the COVID-19 pandemic
	Responsive health care system	[3]% reduction in DALYs,% reduction of the gap between the lower and upper quintiles,% of poor populations spending more than 50 % of their income on health care,% users who report satisfaction with the healthcare system
	Improved financial and political accountability	[3] Number of publicized financial resource allocation decisions, number of corruption instances reported,% of the public reporting satisfaction with the process
	Increased investment in the health sector and strengthening of the health care system	[3] Proportion increase in the health budget, proportion increase in the retention of health workers,% of the public reporting satisfaction with the health care system

not indicate that the country did not have a pandemic plan. Rather, it indicates that the plans were not accessible in the public domain.

For each country with a "missing" plan a replacement country from the same region, with similar characteristics, was identified. We followed the previously described steps to retrieve the replacement pandemic plans. These were identified as "replacement" countries.

Native-speaking research assistants were employed to retrieve any plans which were not available in English.

Inclusion and exclusion criteria for the plans: National plans which were focused on healthcare decision-making and planning, specifically priority setting for resource allocation, were included. In most cases, this was a single document. However in a few instances, the response plan comprised several documents. Documents were included if they were published between March 2020- September 2020 (to reflect the first wave in most countries). Clinical guidelines, and general government response documents (e.g., sustaining the economy or other non-health services (e.g., school closures)) and documents published after September 2020 were excluded. The prisma chart in Fig. 1 depicts the sampling procedure.

Data extraction and analysis: The data extraction tool was based on the operationalized Kapiriri & Martin framework (described above). The tool was pilot tested initially by two research team members who used it to extract data from a sample of two plans, and discussed their interpretations with the principal investigator. After which, three additional research team members independently used the tool to extract information from the same plans to ensure consistency. The research team met regularly and discussed the extracted information to ensure that the tool was appropriate and that there was a common understanding of the operationalized parameters. Once a common understanding was established, the tool was used by two research team members to extract data from the rest of the plans.

Data extraction from the English and Spanish language plans were complete by the research team members. Native language speakers were recruited and trained to conduct data extraction for the plans which were published in the other languages. An online translation program was used to translate the 13 plans, for which we could not find a native language speaker.

The synthesis, analysis and reporting of the extracted data was based on the parameters in the Kapiriri and Martin framework. Initial synthesis was first reported by country, then within each region. These findings are reported in the subsequent papers in this journal and elsewhere [28–31].

3. Availability and accessibility of pandemic priority setting plans

This analysis focused on the degree to which *(i)* plans for priority setting were accessible, and *(ii)* how the plans' accessibility compared with the countries' transparency index. We categorized the accessibility of the countries' pandemic plans in four levels: (i) *readily accessible*: the plan was accessed through the national government ministry of health webpages; (ii) *accessible*: the plan was accessed through Google or Google Scholar; (iii) *somewhat accessible*: the plan was accessed through the third strategy, using contacts of the research team; (iv) *not accessible*: if the plan was not accessed through all three strategies and was replaced. We further assessed if there were any patterns between the plans' accessibility and the country's transparency index.

3.1. Accessibility of pandemic plans and comparison with the transparency index

Additional file 1 provides a detailed description of all the countries that were considered, and the different criteria used, highlighting the countries whose plans were labeled "missing" and the "replacement" countries. We also include a category of "published but inaccessible" plans, for the plans that were referenced in the literature and other government documents but could not be accessed based on our three-step search strategy.

Of the 114 countries that were initially considered for inclusion in the study, after applying all the filters, 71 (62 %) were readily accessible in the public domain, while 29 (25 %) could not be located in the public domain or through the research team's contacts. These were hence

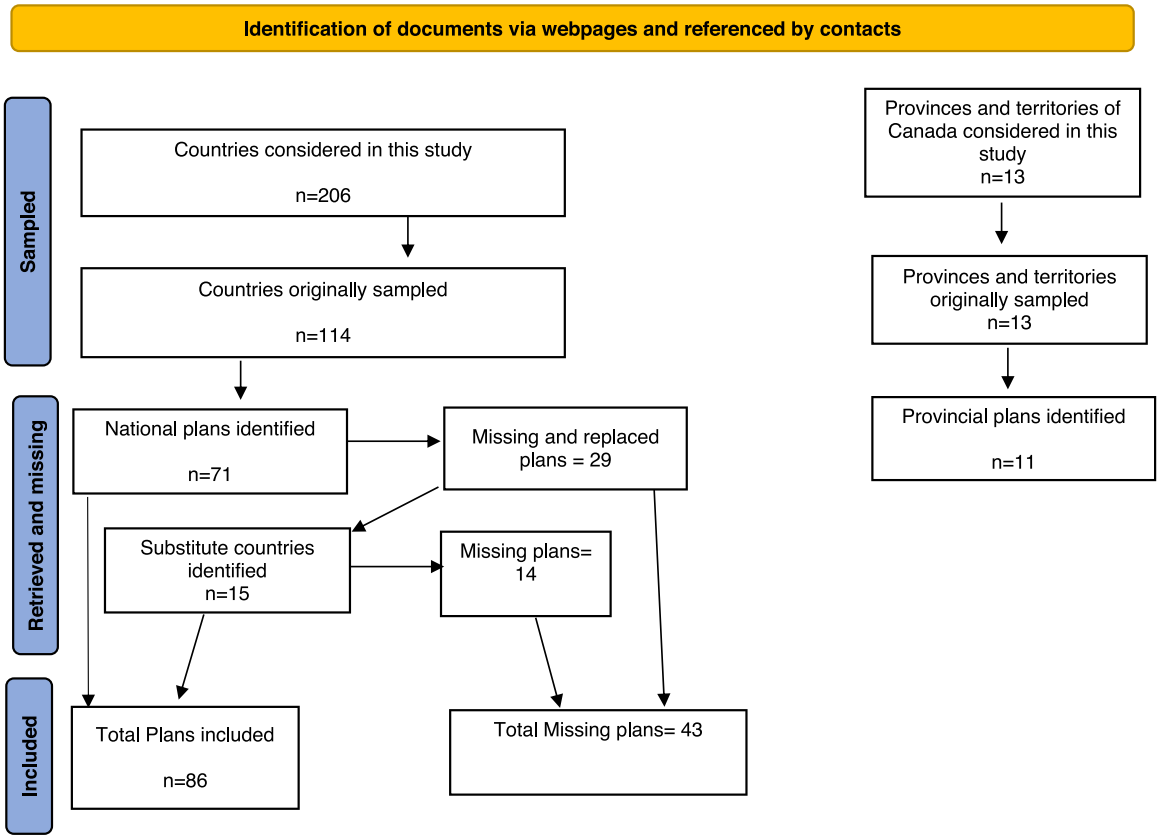

Fig. 1. PRISMA flowchart.

recorded as "missing". Twenty- nine plans replaced the "missing" plans. Of the 29 "replacement" plans, 15 (51 %) were accessible and 14 plans were "missing". We were unable to translate and extract information from two plans hence, these two plans were excluded from the analysis. In summary, we accessed a total of 86 plans and 43 plans were recorded as "missing".

The readily accessible plans were from diverse countries. Accessibility did not vary systematically according to the characteristics of the country that were relevant to the study (socio- economic status, health and political regime, experience with priority setting and disease outbreaks). Readily accessible plans were from low income, middle- and high- income countries e.g. in WHO-AFRO (Niger, South Africa); in WHO-EMRO (Yemen, Qatar); in WHO- SEARO (Nepal, Thailand); in WHO-WPRO (Tonga, Australia); in WHO-EURO (Kazakhstan, the UK) and in Latin America and the Caribbean (Haiti, Mexico).

Similarly, readily accessible plans were from countries with diverse health systems organization and financing. These included countries with predominantly private systems, those with public systems; and those with mixed provider and financing mechanisms. Furthermore, the countries whose plans were readily accessible did not vary according to the countries' experience with systematic PS and/or disease outbreaks.

Within the WHO-AFRO region, eleven national plans were labeled "missing". These plans belonged to countries with varying political regimes, income levels e.g. Lesotho and Seychelles which are upper middle-income countries and Sierra Leone, one of the poorest countries in the world. Six countries were either lower middle income or low income. All eleven countries did not have any documented experience with systematic PS and only Sierra Leone had prior experience with a disease outbreak.

In the Eastern and Mediterranean region, 12/18 countries were included in the study. Of these, three national plans were accessed through the researchers' contacts and three were retrieved by research assistants who were fluent in the native languages in which the plans were published. Four plans were labeled "missing" and replaced by plans from other countries. Analysis of the missing plans revealed that similar to the WHO-AFRO region, the countries had varying political regimes, income levels (high (Kuwait) and low (Sudan)), and varying availability of healthcare resources and infrastructure. All countries, except Kuwait, had experienced political instability.

The study included 24/53 countries from the WHO-EURO region. Of the 24 plans 17 were readily accessible, while 7 were "missing" and were replaced. Three of the seven "replacement" plans were readily accessible while four were accessed through either the second or the third strategy. The countries whose plans were "missing" had varying political regimes, were both high income (e.g. the Netherlands and Belgium) and middle income (e.g. Latvia). The countries also had varying experiences with priority setting (e.g. The Netherlands which is among the pioneers of systematic PS and Latvia with limited documented PS experience). They also had varying health system organization and financing. All sampled countries lacked prior disease outbreak experience.

Within the Latin America and Caribbean region, a total of fourteen national COVID-19 plans were included in the study. Five plans were readily accessible, one plan (Chile) was retrieved through the third strategy, while eight plans were "missing" and replaced. The countries whose plans were "missing" were middle income, had universal health care and combined public/private health systems. All countries lacked experience with systematic PS and disease outbreaks.

3.2. Comparison of the accessibility of pandemic plans and the transparency index

There were no obvious patterns observed when we analyzed the countries whose plans were readily accessible and the countries' transparency index. However, examination of the countries whose plans were "missing" revealed some interesting patterns.

Many of the countries with "missing" plans ranked among the top 30% on their transparency index e.g. Singapore (85) the Netherlands (82), Belgium (76), Barbados (64), South Korea (61), Israel (60); Brunei (60). A couple of countries followed with a transparency index ranking around 50 % e.g. Namibia (57), Latvia (57), Costa Rica (57), Saint Lucia (56), Grenada (53), Mauritius (53), Malaysia (51). Only ten countries whose plans were "missing" had a low transparency index (40 and below).

(Table 2)

4. Discussion

This paper provides a detailed description of the methods used in assessing the degree to which the initial national COVID-19 plans included priority setting [20–23]. We discuss and reflect on the methods we employed and the findings from the secondary analysis of the degree of transparency about priority setting during the COVID-19 pandemic by assessing the accessibility of the pandemic response plans.

The literature discusses the importance of adapting frameworks and guidelines that are developed in other contexts and for other contexts [32]. This is because contextual factors determine the elements of a framework that are critical, and if additional context relevant elements that should be added and/ or considered [33]. To date, the PS literature has not discussed if and how the frameworks for high quality/ effective PS could be adapted to pandemic contexts. Hence, the initial step in this study was to adapt the framework for effective PS. While the framework had been validated and used to evaluate PS [23], it had not been used within the context of a pandemic. Several adaptations were implemented.

First, a new parameter "PS for continuity of services" was added to the framework . This parameter had not been discussed in the PS literature prior to the pandemic. It, however, emerged as critical since, in some contexts, the rule of rescue response to the pandemic resulted in increased mortality attributed to other causes other than COVID-19. Several contexts, to contain the patient upsurge due to the pandemic, diverted hospital beds, human and financial resources from routine essential services to pandemic response. Several procedures that were deemed unessential were deferred or cancelled- with detrimental consequences that are still being felt until now [34,35]. Hence, while the focus of priority setting in this case was on the pandemic, its impact on other services made it critical that evaluating the effectiveness of PS during a pandemic includes assessing if there were plans and priority setting for the continuity of routine services. The identification and inclusion of this parameter in the study highlighted the critical importance of framework adaptation.

Second, although the original framework included various means of verification (interviews, surveys, routine records, policy documents) for the various parameters [19], this study employed only one approach-document review. While document reviews have several limitations which have been discussed in the literature [37,38], our study highlighted the merit of using this approach during a pandemic. The pandemic context was fluid, emotionally and politically charged, and required swift decision making, it was neither appropriate nor feasible to employ the other approaches to conduct a global comparative study. The document review enabled the team to rapidly conduct a global comparative analysis in a timely manner. However, the study suffered from the main limitation of document review studies- namely incompleteness of the available information. This is because research studies (and/or frameworks such as the one employed in this study) often require more information than is presented in policy documents [39]. Hence, while the original framework has five domains, some of the domains could not be assessed based on the retrieved planning documents. For example, not all the planning documents provided detailed description of the PS context (the social, cultural, economic, and political context), for some countries, this information was published elsewhere. Furthermore, two domains (Implementation, Outcome, and impact) could not be assessed based on the retrieved documents. This

Table 2
Analysis of countries with missing plans and their transparency index.

Country	Initially sampled	Included in the study	Region	Transparency rank score	Country	Initially sampled	Included in the study	Region	Transparency rank score
Bahrain	1	0	EMRO	42	Laos	1	0	SEARO	29
Barbados	1	0	PAHO	64	Latvia	1	0	EURO	57
Belarus	1	0	EURO	47	Lesotho	1	0	AFRO	41
Belgium	1	0	EURO	76	Liberia	1	0	AFRO	28
Brunei	1	0	EURO	60	Malaysia	1	0	SEARO	51
Cambodia	1	0	SEARO	21	Maldives	1	0	EURO	75
Costa Rica	1	0	PAHO	57	Mauritius	1	0	AFRO	53
Cuba	1	0	PAHO	47	Myanmar	1	0	SEARO	28
Ecuador	1	0	PAHO	39	Namibia	1	0	AFRO	51
Equatorial Guinea	1	0	AFRO	16	Netherlands	1	0	EURO	82
Eswatini	1	0	AFRO	33	Saint Lucia	1	0	PAHO	56
Gabon	1	0	AFRO	30	San Marino	1	0	EURO	45
Grenada	1	0	PAHO	53	Sao Tome and Principe	1	0	AFRO	47
Hungary	1	0	EURO	44	Senegal	1	0	AFRO	45
Iran	1	0	EMRO	25	Seychelles	1	0	AFRO	66
Iraq	1	0	EMRO	21	Sierra Leone	1	0	AFRO	33
Israel	1	0	EURO	60	Singapore	1	0	SEARO	85
Jamaica	1	0	PAHO	44	South Korea	1	0	SEARO	61
Kuwait	1	0	EMRO	42	Sudan	1	0	EMRO	12
Syria	1	0	EMRO	14	Venezuela	1	0	PAHO	15
Timor-Leste	1	0	SEARO	40	Vietnam	1	0	SEARO	36
Trinidad and Tobago	1	0	PAHO	40					

could have been a limitation of the study's focus on the initial pandemic plans. It is possible that this information was included in the subsequent documents, implementation reports and the epidemiological data. Therefore, it is prudent to advise that the two domains are omitted if this framework is used in studies that are based on *planning* documents. However, studies that include a review of subsequent *emerging* documents, *implementation* and *epidemiological* reports, should consider all five domains in the framework.

The rest of the discussion will focus on the degree of accessibility and transparency of the pandemic plans.

The literature on government transparency, in addition to discussing its benefits, relates transparency to democratic political systems [18]. According to the transparency criteria, policy documents should be available, free of charge and in a language that is understood by the public [1,28]. Consistent with this definition, over half of the plans were readily available, free of charge and were written in the national languages. However, while having the plans in the public domain is an important initial step, it may not have been adequate in ensuring that the documents are effectively accessible to their populations. For example, documents published in the official national language may not be accessible to populations with limited literacy [40]. For those who can read, the frequent use of technical language in policy documents presents an additional barrier to access. Furthermore, it was unclear whether the documents we found online were published on other platforms e.g. local newspapers, which may be more available to the general public, since internet access is not universal. Furthermore, although many governments were most effective in providing information, about disease epidemiology and the public health measures, through daily news communications there was limited communication on the priority setting [14–18]. Future research could explore if similar mechanisms could be employed to publicize the PS plans.

Furthermore, studies during "normal" contexts highlight the reluctance of decision makers to publicize their PS decisions for various reasons including fear of blame and losing public and political support if powerful groups are not prioritized [41]. Consistent with this literature, a lack of transparency about the pandemic was documented [11,42,43]. This might have been due to the fore discussed reasons, which may have been accentuated during the pandemic. Since COVID-19 introduced fear and public panic [44] it was important that decisions were based on credible evidence. Decision makers may have deferred publicizing their decisions because they lacked credible evidence to support their decisions. The novelty of the virus meant that the evidence on the pandemic was constantly evolving and uncertain. The uncertainty may have made policy makers afraid of communicating priority setting plans which were also evolving, since they risked losing public confidence if they did not follow through with the plans.

Furthermore, the lack of publicity could have been a reflection of routine practice, whereby, based on the transparency index literature, non-democratic countries are less transparent.Hence, countries whose plans were "missing" would be expected to be non-democratic and to have a low transparency index [12]. However, this was not consistently observed in our study. It was surprising to find that contrary to the above expectations, three countries whose plans were "missing" had a democratic political regime and a relatively high transparency index. It is possible that policy makers from these countries used other mechanisms of communication, other than the policy documents. Other mechanisms which have been discussed in the literature include the use of media (print, social media, radio, or TV) and public meetings [45]. It is, however beyond the scope of this study to identify the other mechanisms that might have been used to publish the PS plans by the countries whose plans were missing.

The study focused on the first wave of the pandemic The rationale was that if policy makers included PS in the initial pandemic planning, they were inherently acknowledging the critical role of priority setting. However, it is possible that countries included priority setting in their subsequent planning documents, especially as more credible evidence (and pandemic planning guidelines) became available. Furthermore, the fast evolution of the pandemic and the swiftness by which policy makers had to pivot and adjust to address the emerging issues may have made it impossible for them to publicize documents that needed constant updating [46]. Although it was beyond the scope of the study to review the emerging documents for all WHO regions to assess if these speculations are correct, a search conducted to retrieve any relevant follow up documents for the WHO-EMRO region yielded none [25].

This study contributes to the literature on the feasible approaches for conducting policy research during health emergencies. The document

review was the least intrusive approach and was hence not hampered by the public measures and restrictions that made it impossible to implement the other data collection methods. However, the approach has some limitations. The main limitation was the availability and completeness of the documents. As discussed, some plans were missing and as reported in the subsequent papers, not all the plans included a comprehensive priority setting plan. Furthermore, while documents indicated a commitment to implementation, it may not always translate into implementation [4]. It is also possible that some PS activities were implemented but not documented. However, the findings provide the readers with an understanding of some of the challenges presented by conducting a document review study in an evolving context.

5. Conclusion

This paper has provided a detailed description and reflection on the methods used in a global study whose aim was to understand the degree to which the COVID-19 pandemic planning documents integrated parameters of effective priority setting. The study highlights the need to adapt the framework to the priority setting context where it is applied. It is important that any future application of this or any other frameworks includes framework adaptation (to the study context, research questions and methods) as an initial step.

Although 71 countries had readily available plans, plans from 43 countries were "missing". The availability of the plans did not vary according to the country's economic status, health and political system and experience with priority setting and disease outbreaks. However, most of the countries with "missing" plans tended to have a low transparency index. Although unpopular, it is arguably more critical that PS plans and decisions are publicized during health emergencies. In addition to the online platform, making these documents available in languages and formats that are accessible to the public would increase transparency.

While there are limitations associated with document review studies, it may be the most feasible and appropriate approach to understanding how policy decisions are made during the context of a pandemic or any other health emergency. However, once the epidemic has abated, interviews and surveys could be conducted to establish the degree to which implementation/ response was aligned with the documented policy aspirations.

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CRediT authorship contribution statement

Lydia Kapiriri: Conceptualization, Writing – original draft, Writing – review & editing. **Claudia-Marcela Vélez:** Writing – review & editing. **Bernardo Aguilera:** Writing – original draft, Methodology, Writing – review & editing. **Beverley M. Essue:** Writing – review & editing. **Elysee Nouvet:** Writing – original draft, Writing – review & editing. **Razavi s Donya:** Writing – review & editing. **Williams Ieystn:** Writing – review & editing. **Danis Marion:** Writing – review & editing. **Goold Susan:** Writing – review & editing. **Julia Abelson:** Writing – review & editing. **Kiwanuka Suzanne:** Writing – review & editing.

Declaration of competing interest

We declare no conflict.

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Supplementary materials

Supplementary material associated with this article can be found, in the online version, at doi:10.1016/j.healthpol.2024.105011.

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