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Adherence to WHO's terminology?

A multilingual analysis (EN/FR/ES) of COVID-19 terms in supranational (EU) and French and Spanish institutional settings and newspapers

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What happens when terms are used, translated and coined under the pressure of a global pandemic? By analyzing *ad hoc* corpora from the leaders of the World Health Organization (WHO), European Commission (EC), Spain and France, as well as Spanish and French press, this corpusbased study aims to identify the extent to which the WHO influenced and contributed to the standardization of COVID-19-related terminology in French and Spanish during the pandemic.

Publicly available speeches from January 1, 2020 to September 30, 2021 delivered by these four institutional leaders were compiled and analyzed using corpus linguistics techniques. Use frequencies in the media provide contrasting data on term use in selected French and Spanish newspapers.

Results indicate that terminological variation was less pronounced for more established terminology and more widespread for terms coined during COVID-19. Furthermore, in some cases the analyzed supranational and national institutions and the press failed to adopt standardized WHO terminology. The study concludes that national institutions and the press did not rise to their potential as agents for the standardization and harmonization of WHO's COVID-19-related terminology.

1. Introduction

On March 11, 2020, WHO declared the novel coronavirus (COVID-19) outbreak a global pandemic. Director-General (DG) Tedros Adhanom Ghebreyesus underscored the importance of terminology: "Pandemic is not a word to use lightly or carelessly. [...] If misused, *[it]* can cause unreasonable fear, or unjustified acceptance that the fight is over, leading to unnecessary suffering and death."

First officially referred to on January 22, 2020, the "novel Coronavirus" came to dominate WHO's public agenda and its DG's public speeches. In parallel, COVID-19 monopolized institutional discourse, the media and everyday conversations across the globe.

Due to time pressure, this paper hypothesizes that initial term use may not have reflected the options adopted by WHO, the benchmark international organization (IO). What happens when terms are being used, translated and coined under the pressure of a global pandemic?

2. Research objectives

The WHO, a United Nations (UN) agency, is considered the world authority in public health and sanitary measures. Prieto and Morales (2019, 87) found that "perceived linguistic authoritativeness" of a benchmark IO tended to play a role in linguistic harmonization. This study considers whether the same applies in the health sphere against the backdrop of a pandemic.

The time pressure of a global health emergency likely led translators to make translation-related decisions quickly within the WHO itself. What was the WHO's preferred translation of pandemic-related terms in French and Spanish, and to what extent was variation present?

Institutional leaders play a role in promoting and protecting institutional values (Selznick, 1957). Given similar time pressures, did supranational institutions and national leaders adhere or diverge from WHO's terminology when addressing COVID-19? Did terminological adherence vary for newly coined terms compared to previously registered terms?

The press also played a prominent role in communicating COVID-19-related policy and sanitary measures, especially early on. The final research question asks: How were pandemic-related terms disseminated and accepted within media?

By examining these questions through the lens of corpus linguistics, this paper sheds light on translation- and neology-related processes and how specialized public health communication reached the public during a global pandemic.

3. Translation, information dissemination and terminological management during COVID-19

3.1 WHO's linguistic policy and the role of institutional translation

In 1978, Resolution WHA31.13 enshrined Arabic, Chinese, English, French, Russian and Spanish as WHO's working languages (WHA 1978, 1). However, like most UN system organizations, "the trend towards 'monolingualism' is far from decreasing, with the 'hegemonic' use of one language, English [...] for the sake of pragmatism" (Fall and Zhang 2012, 4).

This led the heads of 60 UN system organizations' language and conference services to issue the Vienna Statement in 2016 (Lozinskiy 2020, 9).

Multiple legal instruments have developed and regulated multilingualism in the UN system since. Yet multiple years later, only two specialized agencies "have progressed in treating multilingualism as a cross-cutting issue at the organizational level" (Lozinskiy 2020, 8): WHO and World Intellectual Property Organization.

However, even in such a "cross-cutting multilingual organization" as WHO, English still enjoys a hegemonic position. WHO's DG addresses his audience almost exclusively in English (see his public social media posts, speeches and press briefings).

WHO is the most prominent UN specialized agency responsible for matters affecting health. It enjoys "the technical and linguistic expertise to become terminological benchmarks in their areas of competence, but their contribution to language standardization can be more effective if it is recognized and disseminated in cooperation with other institutions and influential terminological agents" (Prieto and Morales 2019, 109).

Especially in early 2020, Ghebreyesus' public appearances were a crucial component of the pandemic response. WHO established both a supranational and national political agenda to 'flatten the curve,' harmonizing the pandemic-related terminology using pre-existing terms (*community transmission*) and coining new ones (*vaccine nationalism*).

During initial stages of the crisis, WHO language professionals "stepped up to rapidly create glossaries of COVID-19-related terminology and to translate public health information [from English] into a wide range of languages" (Bowker 2020, 2).

COVID-19 therefore demonstrates "the significant role that institutional translation services can play in terminological harmonization processes, not only for the sake of internal consistency, univocity and clarity (i.e., for the quality of

institutional communication), but also for supporting the evolution of specialized terminology in the target language more broadly" (Prieto and Morales 2019, 109).

3.2 European Commission's supranational and France's and Spain's national institutional settings

Unlike many IOs, EU Member States "delegate some of their decision-making powers to the shared institutions they have created, so that decisions on specific matters of joint interest can be made democratically at European level" (EC 2014, 3). The European Commission (EC) "is the politically independent institution that represents and upholds the interests of the EU as a whole" (*ibid.* 19).

France and Spain differ in their political organization. The Constitution (CC, 1958) declares France "an indivisible, secular, democratic and social Republic" (art. 1) and establishes the President as head of state (art. 5). France is a unitary semi-presidential representative democratic republic. Emmanuel Macron has been the President since May 14, 2017.

The Spanish Constitution (BOE, 1978) declares Spain "a social and democratic State, subject to the rule of law" (art. 1.1) taking the political form "of a parliamentary monarchy" (art. 1.3). Article 56.1 stipulates that the King is the Head of State and attributes him symbolic or representative, arbitral and moderative functions. It establishes that "the President directs Government action and coordinates the functions of the other members" (art. 98.2); decision-making powers lie within the Government (or other organs). Spain is a secular parliamentary democracy with a constitutional monarchy. Pedro Sánchez took office as Prime Minister on June 2, 2018.

3.3 Media and information dissemination

During the COVID-19 health crisis, WHO played a key role in coining COVID-19 terminology, while governments and media drove its dissemination. The WHO's guidelines state that "social and traditional media should be part of an integrated strategy with other forms of communication to achieve convergence of verified, accurate information in the context of health crises" (WHO 2017, 28).

According to Prieto et al. (2020, 640), "the role of the news media can be especially critical in disseminating specific terminology not only about the virus and the disease, but also in connection with public health measures for prevention or contention."

Naturally, media played a key role in spreading COVID-19-related specialized knowledge (and terminology), as illustrated by examples from *The New York Times* (Gross and Padilla 2020) or *Le Monde* (Dalloni 2020), and scientifically-

oriented publications for non-specialized audiences, like *National Geographic* (Flores 2020).

3.4 COVID-19-related terminological resources and analyses

COVID-19 was classified as a pandemic 41 days after its initial declaration as a Public Health Emergency of International Concern (PHEIC). The health crisis "demanded a quick, decisive and efficient response by governments to protect lives, curb the spread of the virus and prevent public health systems from being overwhelmed" (Molloy 2021, 40). Governments rapidly introduced legislative and policy measures (BSGUO, 2022).

Translating and communicating pandemic-related information and terminology represented a challenge for language professionals, media and governments. Media outlets initially focused on (vivid, often humorous) neologisms, like *coronababies* (Ro 2020), *lundimanche* in French (Audureau 2020) or *covidiota* in Spanish (Morales 2021). However, "many of the terms currently in vogue will not endure. The ones with a stronger chance of sticking around post-pandemic are those that describe lasting behavioral changes" (Ro 2020).

Various authors have analyzed COVID-19-related terminology. Wang (2019) focuses on institutional and volunteer translation in the first stages of the Wuhan crisis. Bowker (2020) compares COVID-19-related units in Canadian and European French-speaking contexts to determine their degree of internationalization/localization. Domènech-Bagaria and Montané (2022) characterize lexical creativity when coining COVID-19 neologisms in Catalan. Litmanovich et al. (2020) report terminological inconsistencies concerning medical tools for identifying COVID-19 pneumonia in suspected patients while Jelly et al. (2020) conclude that terminological management in the COVID-19 health crisis could drastically improve care.

In parallel, terminology departments and institutions compiled terminological entries, since "the pandemic has seen new terms coined and older ones dusted down for reuse" (Federal Chancellery, 2022). Specific COVID-19-related terminological resources were developed (e.g. the European Parliament's *COVID-19 Terminology Resource Center*). Table 1 presents data from publicly available multilingual COVID-19 datasets involving English, French or Spanish.

None of the four analyzed institutional settings has publicly released COVID-19 terminology collections similar to those in Table 1. However, the United Nations Terminology Database (UNTERM) includes WHO's entries (Figure 1).

Institution	Creation date	Terminological entries	Total (including variants)	Languages
TERMCAT. Catalan Consortium of the Centre for Terminology ^a	March 2020	502	5,968	CA, EN, ES, EU, FR, GL, OC, PT
TERMDAT. Swiss Confederation ^b	March 2020	298	2,731	EN, FR, DE, IT, RM
IATE. EU Translation Center ^c	April 2020	730	25,328	24 EU official languages ^d

Table 1. Summary of comprehensive multilingual COVID-19 datasets

a. Source: https://www.termcat.cat/en/diccionaris-en-linia/286/presentacio

b. Source: https://www.bk.admin.ch/bk/en/home/dokumentation/languages/publications-on-term inology.html

c. Source: https://data.europa.eu/data/datasets/covid-19-multilingual-terminology-on-iate?locale=en d. BG, CS, DA, DE, EL, EN, ES, ET, FI, FR, GA, HR, HU, IT, LT, LV, MT, NL, PL, PT, RO, SK, SL, SV

4. Theoretical framework

This analysis draws on Cabré's Communicative Theory of Terminology (CTT) (1998, 2000, 2003), a linguistic-based approach explaining the relationship between language and specialized communication.

According to Cabré, "dissemination of scientific or technical information requires previous detailed knowledge in the sense that the sender controls the precise meaning of terms" (2003, 196). CTT emphasizes the communicative function of specialized terms and the role they play in facilitating communication between experts in a particular field. Therefore, specialized terms are not just labels for concepts; they are tools for precisely and efficiently conveying meaning. The context in which they appear and the role of users (experts or non-experts) in creating and maintaining the terminology are both crucial.

The CTT "takes into account the dynamic, multipurpose dimension of terms" (Sánchez and García Palacios, 2014, 172); terminological units are "seen as a polyhedron with three viewpoints: the cognitive (the concept), the linguistic (the term) and the communicative (the situation)" (Cabré, 2003, 187).

In the CTT's framework, neology is defined as a multidimensional and relative object that can be described from various perspectives related to the unit, which is a social object used in discourse. Indeed, the existence of a neologism can only be established through discourse, which is anchored both in a given moment and in social, political, ideological, and even thematic circumstances (Cabré, 2016, 131).

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Figure 1. COVID-19 search (UNTERM)

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This research analyzes the function of COVID-19 specialized terms in the corpus through Cabré's communicative lens. Concretely, it examines how they are used in different contexts (national and supranational institutional settings, and newspapers), analyzing whether public communication about COVID-19 reflects WHO's preferred terminological choices.

5. Corpus design, compilation and methodology

This analysis draws on *corpus linguistics*, "the investigation of linguistic research questions based on the complete and systematic analysis of the distribution of linguistic phenomena in a linguistic corpus" (Stefanowitsch, 2020, 5).

To address the research questions, four comparable subcorpora ("select[ing] similar texts in more than one language or variety" (EAGLES, 1996)) comprising publicly available institutional speeches from 01/01/2020 to 30/09/2021 were compiled (see Table 2).

Subcorpus				
identifier	WHO_EN	EC_EN	FR_FR	SG_ES
Institution	World Health	European	French Republic	Spanish Government
&	Organization	Commission	(FR)	(SG)
Acronym	(WHO)	(EC)		
Leader	Tedros	Ursula	Emmanuel Macron	Pedro Sánchez
&	Adhanom	von der Leyen	-	-
Role	Ghebreyesus	-	President	Prime Minister
	-	President		
	Director-			
	General			
Mandate	17/05/2017	01/12/2019	14/05/2017	02/06/2018
	-	-	-	-
	present	present	present	present
Language	EN	EN	FR	ES
Source	WHO	European	Vie publique –	La Moncloa –
(website)	Director-	Commission –	Collection des	Intervenciones del
	General –	Press Corner	discourses publiques	presidente del Gobierno
	Speeches			
Total	531	308	234	263
Documents				

Table 2. Summary of the analyzed subcorpora

Subcorpus identifier	WHO_EN	EC_EN	FR_FR	SG_ES
Selected	520	90	65	45
Documents				
Tokens	463.886	67.474	206.290	259.925
Types	14.129	5.076	12.919	13.505
Lemmas	12.391	4.312	9.185	9.078

Table 2. (continued)

All subcorpora were analyzed to identify COVID-19-related relevant texts with any of the following keywords: *coronavirus*, *COVID/COVID-19*, *epidemic*, *pandemic* and *virus*. Documents using them were included in the corpus, while speeches not primarily (or collaterally) addressing COVID-19 were excluded.

To analyze WHO's translated terms, two additional subcorpora comprising the French and Spanish versions of 354 and 314 speeches were compiled (Table 3).

Subcorpus identifier	WHO_FR	WHO_ES
Selected Docs	354	314
Tokens	422.857	358.775
Types	21.862	19.153
Lemmas	17.942	16.005

Table 3. Summary of the WHO French and Spanish translations subcorpora

The number of documents in the WHO_FR and WHO_ES subcorpora is lower than the original English dataset because WHO's DG speeches are not systematically translated, especially when health crises occur.

Each subcorpus includes several genres (see Table 4). All listed genres were considered.

Table 4. Genres included in the institutional subcorp	ora
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WHO_EN	Address, Keynote, Message, Remarks, Speech, Statement
EC_EN	Speech, Statement
FR_FR	Allocution télévisée, Conférence de presse, Déclaration, Entretien, Interview, Lettre, Message, Tribune
SG_ES	Comparecencia, Declaración institucional, Conferencia de prensa, Intervención, Declaración

These subcorpora were compiled by downloading all speeches from the selected period from the official institutional websites using the *Simple Mass Downloader* web crawler. The EC_EN texts were manually downloaded and directly imported into TXT files. Files were renamed with *Bulk Rename Utility* and converted to TXT using *CloudConvert*. HTML marks, links and headers were stripped to prevent tokens and n-grams used in these contexts from adding extra units to the word count (see *COVID-19 pandemic* in Figure 2), which would skew quantitative results and subsequent statistical inferences. This pre-processing was only required for the three WHO subcorpora.



Figure 2. WHO's website screenshot

In interviews, journalists' questions were manually erased as they would skew keyword-based quantitative results. Interviews were only found in the FR_FR and SG_ES subcorpora.

The *#LancsBox 6.0* software package automatically annotated data for partof-speech and was used to analyze the subcorpora.¹ *#LancsBox* has been used to conduct terminological research by Marín Pérez (2019, 2022) and Ormanova and Anafinova (2022), inter alia.

To identify the most relevant COVID-19-related terms, frequency lists (tokens and n-grams) were generated for the WHO_EN subcorpus. Unsurprisingly, the most frequent nouns are not COVID-19-specific (Table 5).

The 20 most frequent COVID-19-related tokens are COVID-19 (and COVID-2019), pandemic, outbreak, transmission, social, spread, hand, epidemic, hygiene, coronavirus, quarantine, distancing, cluster, isolation, symptom, distance, SARS-CoV-2, handwashing, curve and transmissibility. An exploratory analysis of

^{1.} See Brezina et al. 2020.

Rank	Lemma	Absolute frequency
11	health	5,305
14	country	3,870
21	vaccine	2,533
22	covid-19	2,354
28	pandemic	1,928
30	world	1,874
35	people	1,611
42	case	1,317
50	year	1,159
55	response	984
67	system	792
68	virus	791
70	week	771
74	excellency	733
75	today	732
77	time	722
78	member	718
82	life	699
83	care	684
85	worker	670

Table 5. 20 most frequent nouns (WHO_EN)

randomly selected representative monolexical units (i.e. *quarantine, coronavirus* and *pandemic*) presented high degrees of consistency, little variation and similar linguistic features in both French and Spanish. This study therefore focuses on polylexical terms.

Frequency lists for tokens and n-grams (bigrams and trigrams) were derived. Units of analysis were extracted from the 200 most frequent tokens.

Finally, a sample of ten polylexical units was selected from the 20 most frequent n-grams in the WHO_EN corpus. Selected terms appeared in UNTERM with their entry creation date, demonstrating their terminological status within the UN System.

Table 6 presents the 20 most frequent n-grams and their terminological status in UNTERM and in the three parallel COVID-19 terminological collections (IATE, TERMDAT and TERMCAT); the ten selected terms are highlighted.

	Absolute	UNTE (all) ^e	RM	COVI collect	D-19 terminol ions	ogy
N-gram	frequency	Entry	Year	IATE	TERMDAT	TERMCAT
public health	567	Х	_	Х	Х	\checkmark
COVID-19 pandemic	323	\checkmark	2020	\checkmark	Х	Х
personal protective equipment (PPE)	202	\checkmark	2013	\checkmark	\checkmark	\checkmark
health emergency	199	Х	-	Х	Х	\checkmark
COVID-19 vaccine	152	\checkmark	-	\checkmark	Х	Х
health security	143	Х	-	\checkmark	Х	Х
pandemic preparedness	116	\checkmark	2007	\checkmark	Х	Х
vaccine equity	101	\checkmark	2021	X	Х	Х
physical distance/ distancing	77	\checkmark	2020	\checkmark	\checkmark	\checkmark
community transmission	57	\checkmark	_	\checkmark	\checkmark	\checkmark
vaccine nationalism	54	\checkmark	2021	X	Х	Х
hand hygiene	50	Х	-	Х	\checkmark	Х
diagnostic test	35	Х	-	Х	\checkmark	Х
global pandemic	25	Х	-	Х	Х	Х
vaccine rollout	23	Х	-	Х	Х	Х
COVID-19 virus	22	\checkmark	2020	\checkmark	\checkmark	\checkmark
oxygen concentrator	20	\checkmark	2004	Х	Х	Х
essential medicine	17	\checkmark	-	\checkmark	Х	Х
herd immunity	9	\checkmark	2007	\checkmark	\checkmark	\checkmark
social distance/distancing	8	\checkmark	2020	\checkmark	\checkmark	\checkmark

Table 6. 20 most frequent COVID-19-related n-grams (WHO_EN)

e. Although UNTERM does not provide COVID-19-specific terminology collections, WHO's terminological results were included.

By selecting a sample of ten terminological units, this research applies a corpus-based textual approach with a "language-in-use' focus" (Flowerdew, 2013, 175). It adopts lexicometric methods of frequency analysis, co-occurrence analysis and term clustering following Prieto and Guzmán's (2017, 85) methodology to analyze terminological consistency in institutional translation settings.

The exploration analyzed the three WHO subcorpora, starting with the WHO_EN subcorpus and using keywords to look for equivalents and variants

in French and Spanish (i.e. *inmunidad* and *immunité* to find corpus-based concordances for *herd immunity*). Non-relevant contexts were excluded (e.g. occurrences of *pandemic preparedness* in *Independent Panel for Pandemic Preparedness and Response*). Variants included in UNTERM's terminological entry were also analyzed, even if they were not documented in the WHO subcorpora.

Subsequently, subcorpora of publicly-available speeches from the selected national and supranational settings were analyzed to determine their degree of adherence to WHO's terminological choices.

For the national subcorpora in French and Spanish, analysis encompassed equivalents identified in the WHO_FR and WHO_ES subcorpora, as well as variants found in the comparable subcorpora (e.g., *equipo de protección sanitaria*, an equivalent not found in WHO_ES).

Identified French and Spanish terminology was used to search two of the most read (cf. Journal Regional (2021) and Statista (2022)) major generalist French and Spanish newspapers using the *FACTIVA* database. Sports newspapers (indicated with an asterisk in Table 7) and *Le Monde* (not available with an academic license) were excluded.

Ranking	France (2021)	Spain (2021)
1	Le Monde	Marca*
2	Le Figaro	El País
3	ĽÉquipe*	El Mundo
4	Les Échos	La Vanguardia
5	Aujourd'hui en France	As*
6	La Croix	Abc
7	Libération	La Voz de Galicia
8	<i>L'Humanité</i>	Mundo Deportivo*

Table 7. Most read newspapers in France and Spain

Data from generalist newspapers were included to shed light on the creation and dissemination of COVID-19 neologisms in the media. Due to the scope, time constraints and academic license limitations, the study was limited to two newspapers per language. However, results are representative of the usage trends for selected terms in written press in France and Spain as described in Section 6.

6. Analysis: Uses in supranational and national institutional settings

The ten selected terms were grouped based on the UNTERM entry creation date (Table 8) to determine the degree of terminological adherence to more established terminology and units coined during the COVID-19 pandemic.

Terms added to UNTERM in 2020-2021	Terms previously recorded in UNTERM
COVID-19 pandemic	personal protective equipment (PPE)
vaccine equity	pandemic preparedness
physical distance/distancing	oxygen concentrators
vaccine nationalism	herd immunity
COVID-19 virus	
social distance/distancing	

Table 8. Terms grouped by UNTERM entry creation date

Physical distance/distancing and *social distance/distancing*, and *vaccine nationalism* and *vaccine equity* were clustered, as explained in 6.1.3 and 6.1.4 below.

6.1 Terminology added to UNTERM in 2020-2021

6.1.1 COVID-19 pandemic

WHO declared the *COVID-19 pandemic* in March 2020. Several international leaders (Bainimarama et al. 2021) define it "the biggest challenge to the global community since the 1940s."

EN	FR	ES
coronavirus disease (COVID-19) pandemic (title)	pandémie de maladie à coronavirus 2019 (COVID-19) (title)	pandemia de enfermedad por coronavirus (COVID-19) (title)
COVID-19 pandemic (short form)	pandémie de maladie à coronavirus (COVID-19) (alternate)	<i>pandemia de COVID-19</i> (short form)
	<i>pandémie de COVID-19</i> (short form)	

UNTERM² includes both the full and short term:

Terminological entries in the tables below reproduce the status, formatting and variation (if applicable) from the UNTERM database.
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The French and Spanish WHO subcorpora (Graphic 1) generally omit the article (*pandémie de COVID-19, pandemia de COVID(-19)*); in French, three contexts exclude the preposition (*pandémie COVID-19*). In the EC_EN subcorpus, *COVID-19 pandemic* and *corona/coronavirus pandemic* are used almost equally.

However, different trends emerge in the national settings. FR_FR adheres to WHO's terminological choices: 90% of contexts use *pandémie de COVID-19* and the extended form *pandémie de maladie à coronavirus 2019 (COVID-19)*. However, SG_ES tends to refer to *pandemia del COVID(-19)* (both equally valid in Spanish (RAE, 2020)) and only 5% of contexts use one of the forms documented in WHO_ES.



Graphic 1. COVID-19 pandemic

Similar trends appear in the press: In 90% of contexts, French newspapers use the WHO's short form (*pandémie de COVID-19*). Spanish newspapers mostly refer to *pandemia de la COVID(-19)* and *pandemia de COVID(-19)*. (The latter is documented in WHO texts).

6.1.2 COVID-19 virus

Unsurprisingly, the second most frequent term is *COVID-19 virus*, originally referred to as the *Novel Coronavirus* (2019-*nCoV*) (WHO, 2020). According to the International Committee on Taxonomy of Viruses (ICTV), in the event of "an outbreak of a new viral disease, there are three names to be decided: the disease, the virus and the species. The World Health Organization is responsible for the first, expert virologists for the second, the ICTV for the third" (ICTV, 2020).

As noted by Prieto et al. (2020, 636), "the names of the disease [...] became a key element of communication about the health crisis." Denominations in mainstream newspapers included, inter alia, *China virus*, (*deadly*) *Chinese coronavirus* or (*deadly*) *Wuhan virus* (*ibid*. 644–645).

EN	FR	ES
severe acute respiratory syndrome coronavirus 2 (title)	coronavirus 2 du syndrome respiratoire aigu sévère (title)	coronavirus del síndrome respiratorio agudo severo de tipo 2 (title)
SARS-CoV-2 (acronym)	SARS-CoV-2 (acronym) virus à l'origine de la	SARS-CoV-2 (acronym)
COVID-19 virus (alternate)	COVID-19 (alternate)	coronavirus 2 del síndrome respiratorio agudo severo (alternate)
<i>the virus responsible for</i> <i>COVID-19</i> (alternate)	<i>virus responsable de la</i> <i>COVID-19</i> (alternate)	virus de la COVID-19 (alternate)
2019 novel coronavirus (superseded)	<i>nouveau coronavirus</i> 2019 (superseded)	nuevo coronavirus de 2019 (superseded)

The UNTERM entry includes the following information:

The entry notes: "WHO has begun referring to the virus as "the virus responsible for COVID-19" or "the COVID-19 virus" when communicating with the public. Neither of these designations are intended as replacements for the official name of the virus as agreed by the ICTV."

Graphic 2 presents the diachronic evolution of denominations in the WHO-EN subcorpus. The long official denomination is not documented; its acronym (*SARS-CoV-2*) appears six times (four in March 2021). The most frequently used denominations in the WHO_EN subcorpus are *new/novel coronavirus* (50 hits) and *new/novel virus* (37 hits). Strikingly, the highest values for both appear in January 2021. *COVID-19 virus* (22 occurrences) is the third most frequently used, but only occurs more frequently than the 'novel' terms in February 2021 (six hits).

Unsurprisingly, in the French and Spanish subcorpora (Table 9), the highest values correspond to terms preceded by *new/novel: nouveau coronavirus* (33) and *nouveau virus* (21) in French, and *nuevo coronavirus* (23) and *nuevo virus* (19) in Spanish. The most frequent translations for *COVID-19 virus* are, respectively, *virus de la COVID-19* (16) and *virus à l'origine/responsable de la COVID-19* (12), and *virus de la COVID-19* (22) and *virus causante de la COVID-19* (5).

Translated WHO subcorpora include one occurrence of the full denomination (Table 10), even though the original version does not refer to it. The



Graphic 2. COVID-19 virus chronological evolution (WHO_EN)

WHO_FR subcorpus also uses *coronavirus de la COVID-19* once. Other variations appear in WHO_FR and WHO_ES, especially at the beginning.

The EC_EN subcorpus excludes references to the WHO denominations (Graphic 3).



Graphic 3. COVID-19 virus

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EN		FR		ES	
COVID-19 virus	22	virus de la COVID-19	16	virus de la COVID-19	22
new/novel coronavirus	37	nouveau coronavirus	33	nuevo coronavirus	23
new/novel virus	50	nouveau virus	21	nuevo virus	19
respiratory virus	5	virus respiratoire	5	virus respiratorio	5
SARS- CoV-2 virus	6	virus SARS-CoV-2	2	virus SARS-CoV-2	2
		virus à l'origine/responsable de la COVID-19	12	virus causante de la COVID-19	5
		nouveau variant du coronavirus 2 du syndrome respiratoire aigu sévère (SARS-CoV-2)	1	nueva cepa de coronavirus del síndrome respiratorio agudo severo de tipo 2 (SARS-CoV-2)	1
		coronavirus de la COVID-19	1		
	120		91		77

Table 9. COVID-19 (documented forms) (WHO subcorpora)

Rather, this subcorpus uses more generic terms such as *the virus* (78 occurrences), *the coronavirus* (50) or *this virus* (20).

The FR_FR subcorpus includes references to *nouveau virus* and *virus COVID-19*, but mostly refers to (*le*) *COVID-19*. In SG_ES, *virus (del) COVID-19* is most frequent, followed by other variants (*coronavirus 19* and (*el) COVID-19*). Only one context refers to *virus SARS-CoV-2*; this term does not appear in the French subcorpus.

The trends observed in these subcorpora are mirrored in the press. *New/novel virus/coronavirus* are used most frequently (more than 80% of cases), followed by the term with the official acronym (*virus SARS-CoV-2*). In French newspapers, the proportion of *virus respiratoire* is comparable to the use in all WHO subcorpora.

The following conclusions can be drawn:

When addressing a general audience in his speeches, the WHO_EN uses less preferred denominations, such as *new/novel coronavirus* and *new/novel virus*. COVID-19 virus represents fewer than 20% of documented occurrences. Unsurprisingly, translation patterns in French and Spanish reproduce these trends.

- The EC_EN subcorpus does not adhere to WHO's official terminology. Indeed, only general terms (*the virus, the coronavirus*, or *this virus*) appear. Both the French and Spanish national subcorpora use terms documented in the WHO subcorpora, but the most frequent strategy is to refer to the virus as *le/el COVID-19*.
- Mainstream French and Spanish newspapers adopt the WHO_EN preferred term by using *new/novel virus/coronavirus*. However, the virus' official acronym (*virus SARS-CoV-2*) appears more frequently in those newspapers.

6.1.3 Vaccine nationalism and vaccine equity

UN Secretary-General António Guterres and other leading politicians have called for "massive global solidarity" (UNDGC, 2020) since the beginning of the COVID-19 pandemic. Nevertheless, early in the crisis, individuals hoarded basic supplies and countries stockpiled health supplies. Stockpiling became especially relevant as vaccines were developed and commercialized: "Ten countries have administered 75 per cent of all COVID-19 vaccines. Meanwhile, more than 130 countries have not received a single dose. **Vaccine equity** is ultimately about human rights. **Vaccine nationalism** denies it" (UNRICWE, 2021).

Vaccine nationalism is defined as "an economic strategy to hoard vaccinations from manufacturers and increase supply in their own country. The aim is to stock up and vaccinate the nation as soon as possible regardless of the limited vaccine manufacturers' distribution for the rest of the world" (Riaz et al., 2021, 1). Its recent coining is highlighted by the fact that it appears in quotation marks in the July 30, 2021 speech in the WHO_EN subcorpus (WHO, 2021).

The United Nations Development Programme (UNDP) presents *vaccine equity* as a remedy to *vaccine nationalism*, arguing "that vaccines should be allocated across all countries based on needs and regardless of their economic status" (UNDP, 2022).

UNTERM includes entries for both *vaccine nationalism* and *vaccine equity*. Interestingly, they are not documented in the analyzed COVID-19 terminology collections.

EN	FR	ES
vaccine nationalism(term)	<i>nationalisme vaccinal</i> (term)	nacionalismo vacunal (term)
<i>vaccine equity</i> (term)	<i>équité vaccinale</i> (term)	<i>equidad vacunal</i> (term)

Ghebreyesus uses *vaccine nationalism* 54 times and *vaccine equity* 101 times. Both units start appearing in the corpus after August 2020. The WHO appears to have coined them during the COVID-19 pandemic; UN agencies and stakeholders quickly adopted both terms. Their high frequency in WHO public speeches demonstrates this matter's importance.

In the Spanish and French translated corpora (Graphic 4), *vaccine nationalism* was generally translated as *nationalisme vaccinale* and *nacionalismo vacunal*. It was rendered as *nationalisme en matière de vaccins* in 12% of French contexts and *nacionalismo de las vacunas* in 22% of Spanish contexts.



Graphic 4. Vaccine nationalism

In the EC_EN corpus, a broader concept, *health nationalism*, appeared. According to DeGooyer and Murthy (2022, 71), "a global rollout of vaccines would have undermined the apparent need to shore up national borders to end the pandemic. Instead, the scarcity of vaccines has made health nativism all the more pronounced."

Apparently, both *vaccine nationalism* and *health nationalism* were coined during COVID-19, since only *medical nationalism* was used before 2019 (*Google Books Ngram Viewer* data in Figure 3).

The EC_EN subcorpus more frequently refers to this concept than WHO's *vaccine nationalism* in contexts such as: "...making sure that we do not succumb to **health nationalism**, that we keep supply chains open and that we use all available tools to support access to vaccines [...]" (EC, 2021).



Figure 3. Medical nationalism (Google Books Ngram Viewer)

In both national contexts, *vaccine nationalism* is rare. The French institutional subcorpus and two analyzed French newspapers refer exclusively to *nationalisme sanitaire*. Interestingly, WHO's terms did not transfer to the Spanish national context: they do not appear in the institutional subcorpus.

Newspapers barely refer to this concept. French press only refers twice to *nationalisme sanitaire*. Spanish newspapers use them only 16 times (Table 10).

 Table 10. Vaccine nationalism (Spanish press)

	El Mundo	El País
nacionalismo vacunal	2	5
nacionalismo de (las) vacunas	-	3
nacionalismo sanitario	1	5

In the French and Spanish versions of the speeches, *vaccine equity* was translated as *équité vaccinale/equidad vacunal* in almost 60% of contexts (Graphic 5). In French texts, *équité en matière de vaccins* was used in most remaining contexts, with a single appearance of *équité d'accès aux vaccins*. However, Spanish translations vary more, with equal hits for *equidad en las vacunas/la vacunación*, *equidad en la administración de vacunas* and *equidad en el acceso a las vacunas*. *Equidad de las vacunas* also appeared twice.

The EC_EN subcorpus excludes references to *vaccine equity*, preferring the term *equitable access to vaccines*.

The French subcorpus does not refer to this concept. The Spanish institutional subcorpus avoids the most frequent Spanish term in the WHO subcorpus (*equidad vacunal*), preferring *equidad en el acceso a las vacunas*, in contexts such as: "...el valor de la **equidad en el acceso a la vacuna** de todos y cada uno de los territorios de nuestro país" (Secretaría de Estado de Comunicación, 2021).



WHO (EN, FR & ES) VS. NATIONAL (FR & ES)

Graphic 5. Vaccine equity

French newspapers refer only to *équité en matière de vaccins*, while the following uses appear in the Spanish newspapers (Table 11):

Table 11. Vaccine equity (Spanish press)

	El Mundo	El País
equidad vacunal	1	2
equidad en el acceso a las vacunas	-	2

The following trends emerge for vaccine equity and vaccine nationalism:

- The WHO French and Spanish subcorpora generally translate vaccine nationalism as nationalisme vaccinale and nacionalismo vacunal. French presents slightly more variation than Spanish, but over 75% of contexts still use the most widespread terminological unit (nationalisme vaccinale). The WHO French and Spanish subcorpora mostly translate vaccine equity as équité vaccinale and equidad vacunal. However, more terminological variation appears in Spanish than in French. Many factors (e.g. editorial or stylistic choices, preference for limited variation) could explain these variations among Romance languages, calling for more comprehensive analysis.
- Other analyzed institutional subcorpora refer to *health nationalism*, a broader concept. The FR_FR subcorpus refers exclusively to this, while *vaccine nationalism* only appears infrequently in the EC_EN subcorpus and is absent in the SG_ES subcorpus. Although EC_EN and SG_ES subcorpora refer to

vaccine equity-related concepts, they do not use the most widely used WHO terms. The FR_FR subcorpus does not refer to it.

- Similarly, French and Spanish press do not adhere to WHO's terminology. French newspapers echo national institutional discourse, referring exclusively to *nationalisme sanitaire*. Spanish newspapers refer to both concepts, but vaccine nationalism (*nacionalismo vacunal* and *nacionalismo de las vacunas*) is most prevalent, indicating a certain adherence to WHO terminology (although only documented 16 times in the period). French press prefers the second most used term in WHO contexts (équité en matière de vaccins) and Spanish newspapers refer to both equidad vacunal and equidad en el acceso a las vacunas.

6.1.4 Physical distance/distancing & social distance/distancing

Early in the pandemic, WHO started using *social distance* (or *distancing*) to refer to "a term applied to certain actions that are taken to slow down the spread of a highly contagious disease, including limiting large groups of people coming together" (UNICEF et al., 2020, 4). WHO recommended that *social distance/distancing* and other measures, including mask-wearing and frequent handwashing, be used to flatten the curve (WHO, 2022).

According to Maneo (2021), although the three main English-language publications added this term to their dictionaries in 2020, measures that we now call 'social distancing' have long been people's natural approach to protecting themselves from infectious diseases. Indeed, social distancing played a more essential role during the 1918 pandemic, before the ventilators, antibiotics and vaccines used in the COVID-19 pandemic were widespread.

WHO officially rejected *social distance/distancing* and adopted *physical distance/distancing* nine days after declaring the COVID-19 pandemic: "We can keep connected in many ways without actually physically being in the same room or physically being in the same space with people... We're changing to say physical distance and that's on purpose because we want people to still remain connected" (WHO, 2020a).

Unsurprisingly, WHO quickly picked up this terminological shift; starting in April 2020, only *physical distance* (or *distancing*) appeared in the WHO subcorpora (Graphic 6).

UNTERM includes both terms:

EN	FR	ES
social distancing (avoid)	<i>distanciation sociale</i> (avoid)	<i>distanciamiento social</i> (avoid)
physical distancing (term)	distanciation physique (term)	distanciamiento físico (term)



WHO subcorpus - social & physical distance/distancing

Graphic 6. Chronological evolution of safe/social/physical distance/distancing (WHO_EN)

During the first stage of the pandemic, the WHO_EN subcorpus also occasionally referred to another closely related concept: *safe distance* (which only appeared once in WHO_EN, but was more prevalent in the national subcorpora and media) (Graphic 7).

As illustrated in Graphic 7, French and Spanish translations of the WHO_EN speeches reflected the terminological shift observed in English: *physical distance/distancing* was most prevalent, completely replacing *social distance/distancing* after March 20, 2020. The single use of *safe distance* was translated into French as *distance vous permettant d'être en sécurité* and in Spanish as *distancia segura*.

However, the EC_EN subcorpus and both national institutional subcorpora did not completely adhere to WHO's terminological guidelines (Graphic 7). Even though *distance/distanciation physique* appeared most frequently in the FR_FR subcorpus, *distance de sécurité* was used more frequently than in the WHO_EN subcorpus. In the EC_EN subcorpus, only *social distance* appeared.

The SG_ES subcorpus proves that Sánchez's terminological choices did not adhere to WHO recommendations: *distancia/distanciamiento social* was the most frequent unit (75% of all concordances), followed by *distancia de seguridad*. Only 3% of uses reflected the WHO's preferred term (*distancia/distanciamiento físico*). When analyzing data chronologically, *social distance/distancing* equivalents were also most prevalent in SG_ES (Graphic 8).

French and Spanish media equivalents for *distance/distancing* differed significantly from the terms in the WHO_EN subcorpus. Graphic 9 presents 1,044 hits in French newspapers and Graphic 10 includes 2,097 results in Spanish news-



Graphic 7. Safe/social/physical distance/distancing



Graphic 8. Chronological evolution of safe/social/physical distance/distancing (SG_ES)

papers. In almost all months, *physical distance/distancing* was the least frequent term. *Distance/distanciation sociale* proved the most widespread term in French media.

As Graphic 10 illustrates, Spanish newspapers adhered even less than French media to WHO's preferred terminology when referring to distancing-related measures. After February 2020, French press barely referred to *distance de sécurité*; between March and July 2020, the use of *distance/distanciation sociale* was significatively higher than *distance/distanciation physique*. However, in Spanish media,



Graphic 9. Safe/social/physical distance/distancing (French press)

distancia/distanciamiento físico were least frequent, while *distancia de seguridad* was most frequent.





The following trends emerge around *distancing*:

- WHO's French and Spanish versions, as expected, systematically adhere to WHO preferences. As of March 20, 2020, *social distance/distancing* is replaced by *physical distance/distancing*.
- In the EC_EN subcorpora, only *social distance* appears.
- Uses in national subcorpora differ. Although distance/distanciation physique is most frequent in FR_FR, it coexists with distance de sécurité more than in the WHO_EN subcorpora. In SG_ES, distancia/distanciamiento físico barely appear. Instead, distancia de seguridad and distancia/distanciamiento social are most frequent.

 In French media, *physical distance/distancing* represent 25–65% of contexts after March 2020. In French newspapers, however, *social distance/distancing* appears to be more widespread than in Spanish newspapers, where *distancia de seguridad* is the most frequent unit (35–85% of contexts).

6.2 Terminology previously recorded in UNTERM

6.2.1 Personal protective equipment (PPE)

Personal protective equipment is "a critical component of a country's effective emergency response to COVID-19" (The Global Fund, 2022).

WHO issued a document with technical specifications (WHO, 2020b) to address the issue in November 2020.

EN	FR	ES
<i>personal protection equipment</i> (term)	<i>équipement de protection</i> <i>individuelle</i> (term)	equipo de protección personal (term)
PPE (acronym)	EPI (acronym)	EPP (acronym)
<i>personal protective equipment</i> (synonym)		
<i>personal protective gear</i> (synonym)		

UNTERM provides the following entry:

In WHO_EN, only *personal protective equipment* appears (alongside its acronym: *PPE*; Graphic 11).

In WHO_ES, *equipo de protección personal* (and the acronym *EPP*) is most frequently used. According to UNTERM (Figure 4), this is the most common WHO denomination.



Figure 4. Equipo de protección personal (UNTERM)

However, according to *Google Books Ngram Viewer* data (Figures 5 and 6), *equipo de protección individual* (*EPI*) is used more frequently in Spanish.

The WHO_FR subcorpus prefers équipement de protection individuelle (and its acronym: *EPI*) in almost all contexts (the term équipements de protection



WHO (EN, FR & ES) VS. NATIONAL (FR & ES)

Graphic 11. Personal protective equipment (PPE)



Figure 5. Google Ngram Viewer (singular)

personnelle appears just twice). Therefore, the two subcorpora present opposite trends.

Panace@'s Glosario de covid-19 (EN-ES) (Saladrigas et al. 2021), labels *equipo de protección personal* as 'Latin American Spanish'. According to one representative in WHO's Spanish Translation Unit, this resource became a major reference for WHO's COVID-19 terminological work (personal communication).

WHO's terminological choice in Spanish (*EPP* instead of *EPI*) might be related to the UN organizations' preference for variants in so-called 'pan-Hispanic Spanish,' "a standard meant to be understood by diplomats, officials, NGOs, aca-

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Figure 6. Google Ngram Viewer (plural)

demics, media outlets and the general public from all Spanish-speaking Member States" (Perazzo, 2010).

The EC subcorpus only refers once to this gear, adopting the English term used in the WHO setting (*personal protective equipment*).

National institutional settings also present differences. The French institutional subcorpus only includes *équipement de protection individuelle* and omits the acronym.

Although Sánchez's speeches use *EPI*, the complete version *equipo de protección individual* does not appear. Interestingly, the corpus includes terms not documented in the WHO subcorpus (or UNTERM): *equipo de protección sanitaria* and *equipo de protección*. In mainstream media, French data (Graphic 12) are consistent with the uses documented in WHO-FR and other French subcorpora: the only term used is *équipement de protection individuelle* (and *EPI*).

However, in Spanish newspapers (Graphic 13), WHO's Spanish terminological choice (*equipo de protección personal* (*EPP*)) appears infrequently. The term exclusive to the Spanish institutional subcorpus (*equipo de protección sanitaria*) appears in one article. The most frequently used term, *equipo de protección individual* (*EPI*), does not appear in the WHO_ES subcorpus.

The following trends emerge for the term personal protective equipment:

- WHO's institutional French and Spanish subcorpora use different terms: French prefers équipement de protection individuelle (EPI), while the Spanish unit opts for equipo de protección personal (EPP). As seen in Figures 5 and 6, however, equipo de protección individual (EPI) is the most widely used term in Spanish (Google Books Ngram Viewer).
- The EC_EN subcorpus indicates that the EU has adopted WHO's terminology. However, national settings present different trends: while the French institutional subcorpus adopts WHO's recommendations (*équipement de protection individuelle (EPI*)), the Spanish national subcorpus uses *equipo de pro-*



Graphic 12. Personal protective equipment (PPE) (French press)

tección individual (*EPI*) and *equipo de protección sanitaria*. The latter rarely appears in mainstream press.

 Newspapers present similar trends. Les Échos and Le Figaro only use WHO's preferred terminology, while Spanish newspapers almost exclusively refer to equipo de protección individual (EPI) and avoid WHO's preferred choice (equipo de protección personal (EPP)).

6.2.2 Pandemic preparedness

Pandemic preparedness is the "continuous process of planning, exercising, revising and translating into action national and sub-national pandemic preparedness and response plans" (WHO, 2011).

UNTERM includes the following entry:

EN	FR	ES	
<i>pandemic preparedness</i> (term)	état de préparation à une pandémie (term)	preparación para una pandemia (term)	

Both the French and Spanish WHO subcorpora (Graphic 14) adopt this term in most contexts, with *préparation aux pandémies/à* (*la/une*) pandémie and



Graphic 13. Personal protective equipment (PPE) (Spanish press)

preparación frente a/ante (la/una) pandemia) appearing most frequently. Variation is clearly present in the chosen prepositions and the phrase's grammatical structure: in the French WHO subcorpus, these terms coexist with préparation en cas de pandémie and préparation à la COVID-19; in Spanish, preparación para (la/una) pandemia appears in more than a third of all cases. Overall, these phrases are documented in 10–12 contexts in each subcorpus.

All other subcorpora consistently adhere to WHO's most frequent terminology in all three languages. However, the term is used less frequently, appearing only three times in EC_EN, five in EM-FR and just once in PS-ES. All three settings refer to *pandemic preparedness*, *préparation aux pandémies/à (la/une) pandémie* and *preparación frente a/ante (la/una) pandemia*.

These terms were rarely used by mainstream newspapers during the period, appearing just seven times in *Les Échos* and *Le Figaro* and three times in *El País* (Tables 12 and 13).

	Les Échos	Le Figaro
préparation aux pandémies	5	1
préparation pandémique	-	1

 Table 12.
 Pandemic preparedness (French press)



Graphic 14. Pandemic preparedness

Table 13. Pandemic preparedness (Spanish press)

	El Mundo	El País
preparación ante una pandemia	-	1
preparación para (la/una) pandemia	-	2

The following trends emerge for *pandemic preparedness*:

- French and Spanish versions of the DG's speeches include some variation for the term *pandemic preparedness*. The most frequently used units are *préparation aux pandémies/à (la/une) pandémie* and *preparación frente a/ante (la/ una) pandemia*.
- The other three institutional settings consistently adopt WHO's terminology, although the topic is discussed infrequently.
- Newspapers present similar trends: préparation aux pandémies appears most frequently in Les Échos and once in Le Figaro (alongside the variant préparation pandémique). El País includes three occurrences of preparación ante una pandemia and preparación para (la/una) pandemia.

6.2.3 Herd immunity

WHO defines *herd immunity* as "the indirect protection from an infectious disease that happens when a population is immune either through vaccination or immunity developed through previous infection" (WHO, 2020c).

Multiple government officials and policies embraced herd immunity as an early pandemic response. Ghebreyesus deemed the strategy "scientifically and ethically problematic," claiming on October 12, 2020 that "never in the history of public health has herd immunity been used as a strategy for responding to an outbreak" (WHO, 2020d).

UNTERM includes herd immunity:

EN	FR	ES
<i>herd immunity</i> (term)	<i>immunité collective</i> (term)	<i>inmunidad colectiva</i> (term)
	<i>immunité de groupe</i> (synonym)	<i>inmunidad de grupo</i> (term)
		inmunidad grupal (synonym)

Ghebreyesus refers to this concept in nine contexts. Data confirm (Graphic 15) that Spanish texts in WHO_ES consistently use *inmunidad colectiva*, assuring terminological harmonization. In WHO_FR, *immunité collective* generally appears, while *immunité de la population* appears less frequently.



Graphic 15. Herd immunity

Despite its crucial importance, the EC_EN subcorpus does not refer to this concept, including just three references to *immunity* (e.g., "At a certain point in time, we might need booster jabs to reinforce and prolong *immunity*".)

The national institutional settings present different trends: while FR_FR systematically adheres to the most widely used term in WHO_FR (*immunité collective*), SG_ES uses two terms not documented in the WHO_ES subcorpus: *inmunidad de grupo* and *inmunidad de rebaño*. Saladrigas et al. (2020, 135) recommend against using the translation "rebaño" ('herd'), Navarro considers it a "*calco chapucero*" [sloppy calque].³

The Spanish press generally uses *inmunidad de grupo* and *inmunidad de rebaño*, alternating both terms in *El País* and *El Mundo* (Graphic 17). WHO's preferred term, *inmunidad colectiva*, appears just 5–20% in mainstream Spanish media.

In *Le Figaro* and *Les Échos, immunité collective* appears most frequently (75–95%), followed by *immunité de groupe* (10–40%), as reflected in Graphic 16.

The second variant documented in WHO_FR, *immunité de la population*, is barely used in media (*immunité populationnelle* appears once in *Le Figaro*).



Graphic 16. Herd immunity (French press)

^{3.} Fernando Navarro, Twitter post, 24 January 2021, 12:24 p.m., https://twitter.com/navarrotradmed/



Graphic 17. Herd immunity (Spanish press)

The following trends emerge for *herd immunity* in French and Spanish:

- WHO consistently translated this term as *inmunidad colectiva* in the WHO_ES subcorpus. It was generally rendered as *immunité collective* in WHO_FR, with *immunité de la population* appearing in fewer than 10% of contexts.
- The EC_EN subcorpus does not refer to this concept.
- The French national subcorpus adheres to WHO's preference (*immunité collective*), while WHO's preferred term is not used in the Spanish national subcorpus, where *inmunidad de grupo* and, less frequently, *inmunidad de rebaño*, appears.
- French newspapers adhere to WHO's terminological preference, *immunité collective*. The second most frequent unit, *immunité de groupe*, does not appear in the WHO_FR subcorpus. Spanish newspapers mirror the institutional speeches subcorpus, with *inmunidad de grupo* and *inmunidad de rebaño* (WHO's less preferred terminological choices) appearing most frequently. Complex sociolinguistic and pragmatic causes might explain these differences among languages, like the terminological preferences of spokespersons or institutional settings (i.e., *inmunidad de grupo* is most frequent on the Spanish government's website).

6.2.4 Oxygen concentrator

WHO's Technical specifications for oxygen concentrators guide defines an oxygen concentrator as "a medical device that draws in air from the environment and

passes it through molecular sieve beds to concentrate room oxygen to therapeutic levels for delivery to the patient" (WHO, 2015, 6).

In the COVID-19 health crisis, they "are of extreme importance in respiratory infectious disease management" because they "deliver pure, high quality oxygen with the appropriate concentration vital for the treatment of moderate-to-severe COVID-19 patients with subnormal blood oxygen levels" (WHO, 2020e).

UNTERM provides the following information:

EN	FR	ES
<i>oxygen concentrator</i> (term)	générateur d'oxygène (term)	<i>concentrador de oxígeno</i> (title)
	<i>concentrateur d'oxygène</i> (synonym)	

As we can see, the French UNTERM entry provides two synonyms: *générateur d'oxygène* and *concentrateur d'oxygène*. However, INMATEC (2020) indicates that "an oxygen concentrator is understood as small medical systems for home use. The term oxygen generator indicates systems on a larger scale."

All WHO subcorpora (Graphic 18) consistently translate *oxygen concentrator* as *concentrador de oxígeno* and as *concentrateur d'oxygène* (although UNTERM offers *concentrateur d'oxygène* as valid).



Graphic 18. Oxygen concentrator

The other three institutional subcorpora omit this term, probably because of its technical nature (*oxygen concentrators* were probably deemed avoidable when reporting about COVID-19).

This term was also infrequent in media, appearing only seven times in French and Spanish newspapers (Tables 14 and 15).

1 10 1 1		
	El País	El Mundo
concentrador de oxígeno	1	1
generador de oxígeno	3	-

Table 14. Oxygen concentrator in Spanish press

Table 15. Oxygen concentrator in French press

	Les Échos	Le Figaro
concentrateur d'oxygène	1	1
générateur d'oxygène	-	-

Interestingly, *generador de oxígeno* (not documented in the WHO Spanish subcorpora) appears more frequently in *El País* than *concentrador de oxígeno*. *El Mundo* refers to *concentrador de oxígeno* once.

7. Discussion and conclusions

This study aimed to examine the degree of adherence to COVID-19-related terminology coined or employed by WHO. Six subcorpora spanning the period from January 2020 to September 2021 were created. The first three comprised the WHO DG's speeches in the original English, and their translations into Spanish and French. Ten multi-word terms from among the 20 most frequent COVID-19-related n-grams in the English WHO subcorpus were selected and analyzed. Results were contrasted with speeches delivered by the leaders of France, Spain and the European Commission, as well as usage of COVID-19related terminology in national newspapers.

Two main conclusions can be drawn. First, terminological variation was less pronounced for more established terminology and more widespread for terms coined during the pandemic. Second, selected supranational and national institutions and the press failed to adopt standardized WHO terminology to describe the health crisis.

This was most patent in *social/physical distance/distancing*. Although WHO replaced *social distance/distancing* with *physical distance/distancing* early, *social distance/distancing* (and their French and Spanish equivalents) and *safe distance* (variant documented in the WHO subcorpora in the early months) appear more

frequently than WHO's preferred term (*physical distance/distancing*). An initial terminological choice was thus quickly taken up in institutional settings and the media, despite the WHO's recommendation. This underscores the essential role institutions should play in establishing terminology as early as possible and the importance of finding allies in national and supranational institutional settings, so terminological dispersion does not contribute to "misinformation on effective methods of prevention [, which is] widespread and may be contributing to poorer understanding of how to effectively reduce transmission of the virus" (Bailey et al., 2020, 3291).

Moreover, the EC_EN subcorpus did not include *herd immunity, oxygen concentrator* and *COVID-19 virus*. This may be because the political agendas – and therefore, the terminology – of the EU and WHO do not align completely. A corpus-based exploration of the EC_EN subcorpus indicates a greater emphasis on economic and political issues in Von der Leyen's speeches (Morales 2022, 163). More consolidated units (*pandemic preparedness* and *PPE*) fully adhere to WHO's English terminological choices. However, more variation is found in units coined and widely used during the COVID-19 crisis: *corona/coronavirus pandemic* (not documented in the WHO subcorpora) is almost as frequent as *COVID-19 pandemic* (WHO's preferred form). EC_EN presents the lowest values for less established terms (*vaccine nationalism, vaccine equity*), while some terms did not appear at all (*safe distance* and *physical distance/distancing*).

Differences between more consolidated and newer terms also appeared in national institutional settings. In the French national subcorpus, consolidated terms like *PPE*, *pandemic preparedness* and *herd immunity* fully adhere to the most frequent terms in the WHO French subcorpus. For two recent coinings (*COVID-19 pandemic* and *social/physical distance/distancing*), national contexts also align with WHO's preferred French terminology. However, for *COVID-19 virus*, the most frequent forms are (*le*) *COVID-19* and *virus COVID-19* (documented in WHO's French subcorpus). For *vaccine nationalism*, Macron does not use WHO's terminology, instead referring to *health nationalism*, and *vaccine equity* goes unmentioned.

The Spanish national setting presents even less adherence to WHO's preferred terminology. Of ten analyzed polylexical terms, only *pandemic preparedness* fully adheres to WHO's most frequent Spanish equivalent. This difference is probably due to WHO's preference for a so-called 'pan-Hispanic' variant. For all other cases, the most frequent terminological choices either are not documented in the WHO subcorpus (*pandemia del COVID(-19)*) or are infrequent (*equidad en el acceso a las vacunas*). Although WHO established a supranational agenda (and terminology) on COVID-19, national settings did not always adhere to it, especially for politicallyoriented terms (*vaccine nationalism, vaccine equity*).

Press indisputably plays a major role in disseminating information, but many times the media echo the discourse of political and institutional leaders. Although they could serve as agents of terminological standardization and harmonization, they instead appear to be freer than institutional settings.

For more consolidated units, French and Spanish newspapers seem to prioritize terminology not used by WHO: adherence was only found for *immunité collective*.

For more recent units, the French press adhere to WHO's French terminological choices for *COVID-19 pandemic* and *COVID-19 virus*, but *vaccine nationalism* and *vaccine equity* do not align with WHO's choices. Spanish press prefers WHO's most frequent Spanish terminology for *vaccine equity* and *COVID-19 virus*; WHO's secondary terminological choices (*nacionalismo de las vacunas* or *pandemia de COVID(-19)*) also appear regularly.

Vaccine nationalism and *vaccine equity* are probably the best examples on how each setting adjusts its discourse (thus, its political agenda) to its interests. While French and Spanish institutional settings and press barely use them, they are more relevant in supranational settings like WHO, which advocated for global cooperation starting early in the pandemic.

The analysis presented herein has provided a detailed insight into the use of preferred terminological choices in WHO's subcorpora and in the other supranational and national subcorpora. Data suggests that adherence to WHO's terminology is extremely variable, with higher degrees for more established terminological units than for newer coinings. Often, institutions and the press failed to adopt standardized WHO terminology to describe the health crisis.

Ideally, WHO and other national and supranational institutional settings would have developed a shared terminological management strategy to use, coin and disseminate information (and terminology) to boost COVID-19-related health literacy among their citizens. Indeed, more effective communication strategies and greater terminological consistency across institutions in health crises can help bridge the gap between experts and non-experts in understanding key terms and enhance overall communication on the topic.

Further research should consider the impact of sociolinguistic, pragmatic and linguistic factors, analyze the ten terms not registered in UNTERM, and consider other media sources, including social media and audiovisual recordings.

One key conclusion arises: during the COVID-19 health crisis, national institutions and the press did not rise to their potential as agents for standardization and harmonization of WHO's COVID-19-related terminology.

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