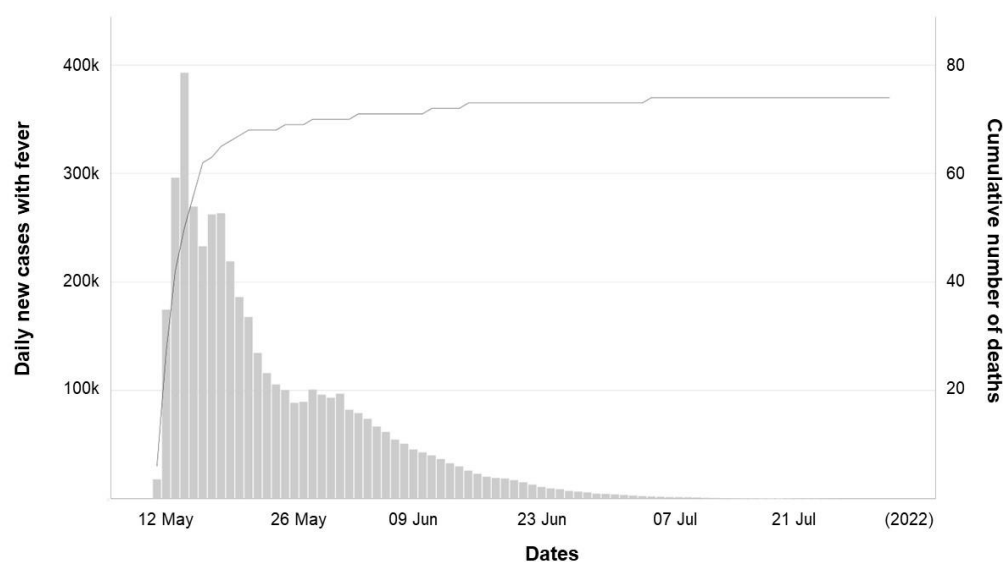
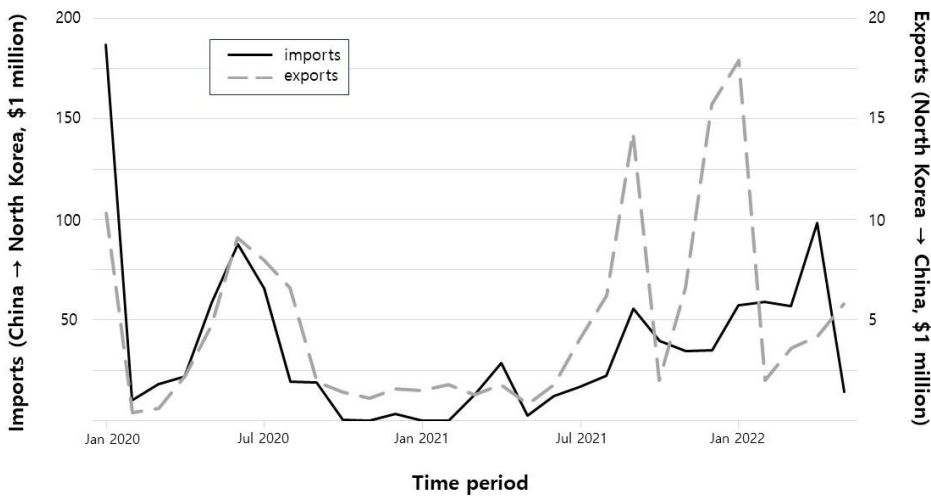


Supplementary figures



Supplementary figure 1. Daily new cases with fever (bar graph) and cumulative number of deaths (line graph), based on the Korean Central News Agency (KCNA) data collected by 38 North.



Supplementary figure 2. Trend of exports and imports between North Korea and China each month, based on the data from *the Korea International Trade Association*.

Supplementary tables

Supplementary table 1. Classification criteria and keywords of each subgroup.

Group	Subgroup	Classification criteria and keywords
COVID-19 statistics	(a-1) COVID-19 statistics in North Korea	Programs on daily (or cumulative) figures of COVID-19 related fever cases and deaths inside the country
	(a-2) COVID-19 statistics outside North Korea	Programs on daily (or cumulative) figures of COVID-19 confirmed cases and deaths worldwide
Clinical aspects	(b-1) explanation on COVID-19	Programs explaining basic information on the characteristics of coronavirus (e.g., features of the coronavirus variants, defense mechanism of cell against coronavirus)
	(b-2) preventive measures	Programs introducing preventive measures of COVID-19 in each environment (e.g., preventive measures in public place or home)
	(b-3) instructions for medication usage	Programs concerning the medication usage in each target population (e.g., medication usage in pregnant women, children, or diabetic patients)
	(b-4) home-care management	Programs instructing self-quarantined patients or their family (e.g., hygiene management, simple tips to handle clinical symptoms)
	(b-5) instructions for post-COVID conditions	Programs concerning post-COVID symptoms (e.g., instructions to manage musculoskeletal or gastrointestinal symptoms remaining after COVID-19 infection)
Structural and societal aspects	(c-1) national disease control system	Programs concerning the control system and management by the health authorities
	(c-2) propaganda materials	Programs with propaganda features to enhance solidarity and exert pressure not to violate guidance

Supplementary table 2. Detailed characteristics of KCNA programs on COVID-19.

Broadcast time period		(a) COVID-19 statistics		(b) clinical aspects					(c) structural and societal aspects		Total
		(a-1)	(a-2)	(b-1)	(b-2)	(b-3)	(b-4)	(b-5)	(c-1)	(c-2)	
2020	Jan	0	10	6	0	0	0	0	0	0	16
	Feb	0	84	30	17	0	0	0	0	0	131
	Mar	0	83	22	86	0	0	0	0	0	191
	Apr	0	77	0	14	0	0	0	0	0	91
	May	0	27	0	0	0	0	0	0	0	27
	June	0	2	0	0	0	0	0	0	0	2
	July	0	0	1	0	0	0	0	5	3	9
	Aug	0	21	3	0	0	0	0	0	35	59
	Sept	0	14	4	0	0	0	0	0	23	41
	Oct	0	12	5	0	0	0	0	0	20	37
	Nov	0	11	0	10	0	0	0	0	25	46
	Dec	0	12	0	15	0	0	0	0	45	72
2021	Jan	0	11	0	18	0	0	0	0	43	72
	Feb	0	25	0	9	0	0	0	0	33	67
	Mar	0	65	2	7	0	0	0	0	49	123
	Apr	0	50	0	5	0	0	0	0	43	98
	May	0	63	0	6	0	0	0	0	59	128
	June	0	58	0	2	0	0	0	0	54	114
	July	0	55	0	0	0	0	0	0	54	109
	Aug	0	52	0	0	0	0	0	0	52	104
	Sept	0	49	0	0	0	0	0	0	48	97
	Oct	0	48	0	0	0	0	0	0	49	97
	Nov	0	42	0	0	0	0	0	0	43	85
	Dec	0	52	0	0	0	0	0	0	53	105
2022	Jan	0	57	0	0	0	0	0	0	56	113
	Feb	0	37	0	0	0	0	0	0	42	79
	Mar	0	58	0	0	0	0	0	0	61	119
	Apr	0	44	0	0	0	0	0	0	49	93
	May	67	33	14	8	49	64	17	8	86	346
Total		67	1,152	87	197	49	64	17	13	1,025	2,671

Note. The programs were classified according to the subgroups as follows: (a-1) COVID-19 statistics in North Korea, (a-2) COVID-19 statistics outside North Korea, (b-1) explanation of COVID-19, (b-2) preventive measures, (b-3) instruction for medication usage, (b-4) home-care management, (b-5) instruction for post-COVID conditions, (c-1) national disease control system, (c-2) propaganda materials.

Supplementary table 3. Correlation analysis between media coverage and trade volume.

KCNA programs on COVID-19 (Included time period)	Trade volume (Imports and exports)		Imports		Exports	
	<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>
January 2020 to December 2020 (12mo)	-.484	.111	-.468	.125	-.665*	.018
January 2020 to December 2021 (24mo)	-.470*	.020	-.472*	.020	-.284	.178
January 2020 to May 2022 (29mo)	-.313	.099	-.324	.087	-.075	.700

Note. KCNA=Korean Central News Agency.

* $p < .05$.