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The coronavirus disease 2019 pandemic and the rights of the child in Japan

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Abstract **Background:** Few studies have used direct reports by children to assess how the rights documented in the United Nations Convention on the Rights of the Child (CRC) have been affected during the pandemic of coronavirus disease 2019 (COVID-19).

Methods: Data were obtained from the CORONA-CODOMO Survey, a web-based survey conducted from April to May 2020 in Japan, targeting children aged 7–17 and parents/guardians of children aged 0–17. We focused on self-reports from children, including two open-ended questions asking their needs and opinions. The results were analyzed according to the five categories of rights defined by the CRC: education, health, safety, play, and participation.

Results: Among the 2,591 children who participated in the survey, 1,292 children (49.9%) answered at least one of the two open-ended questions. The most frequent concern was COVID-19 infecting members of their families (78.2%), followed by the inability to see their friends (74.3%). There were 1,523 direct comments from children. The comments covered a wide range of the rights in the CRC, including reopening of schools, disparities in education, access to health information, alternatives for playing and seeing friends, and needs for participation and being heard. Few comments were related to safety whereas a certain proportion of children were victimized within households.

Conclusions: Our results suggest that the rights outlined in the CRC have been restricted during the COVID-19 pandemic. Health and educational professionals working with children and policymakers should introduce the rights-based approach to protect the best interests of children during and after the pandemic.

Key words children's right, COVID-19, SARS-CoV-2, United Nations Convention on the Rights of the Child, web-based survey.

The World Health Organization declared the outbreak of coronavirus disease 2019 (COVID-19) as a pandemic on March 11, 2020.¹ In Japan, a request for school closure throughout the nation was announced by the government on March 2, lasting until June in some areas. Furthermore, a nationwide state of emergency, which requested that citizens stay at home as much as possible, was declared from April 7 to May 25.

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Previous studies estimated that > 90% of children with COVID-19 had relatively mild symptoms.^{2–4} Nevertheless, measures taken to prevent the transmission of the virus, such as physical distancing, lockdown strategies, and school closures, can place burdens on children in multiple ways. United Nations (UN) alerts reported that such burdens include poverty, infant mortality, educational deprivation, malnutrition due to discontinuation of school meals, violence, and abuse, which all have future impacts on their development and well-being.⁵

In 1991, Japan ratified the United Nations Convention of the Rights of the Child (CRC)⁶ and promised to uphold the basic rights of every child. Previous research has suggested

that the pandemic is harming the rights of the child.^{7–11} The Committee on the Rights of the Child (hereafter, the Committee) has warned that children’s rights are affected by the health, social, educational, economic, and recreational impacts of the pandemic, especially among children under states of emergency or lockdowns.⁷

Even in such a crisis, children are capable of actively engaging in advocating for social change.¹² Only a few studies have explained how this pandemic has affected children’s rights based on children’s voices,^{12,13} and there are no such reports to date to describe the situation in the Japanese context. Exploring the impact of the pandemic from the children’s perspective within the CRC, the internationally shared legal framework, can contribute to better understand the best interests of children and place children’s rights at the center of the COVID-19 response. This study aimed to explore how the rights in the CRC have been restricted during this pandemic, based on children’s self-reports from a web-based survey. We also describe what actions we took in our project in response to the voices obtained from this study.

Methods

Data collection

Data were collected as a part of the CORONA-CODOMO Survey (CODOMO means “children” in Japanese), administered mainly by the National Center for Child Health and Development (NCCHD) in Japan. The project aims to measure the health and wellbeing of children and families during the COVID-19 crisis and to provide related information to children, families, and professionals who work with children. A web-based, multi-phased anonymous survey was conducted in children aged 7–17 and parents/guardians of children aged 0–17. The age range of children included in the study was based on ethical considerations¹⁴ and the definition of children by the CRC.⁶ Further details of the study are described elsewhere.¹⁵ We chose to present the results obtained in the first phase, in which participants were recruited from April 30 to May 31, 2020, to assess the impact of the state of emergency and school closure on children during the early phase of the pandemic. The survey was advertised in multiple ways, including on our website (https://www.ncchd.go.jp/center/activity/covid19_kodomo/survey.html#3tab), through social media, and via distribution through child-related organizations. Children could participate by themselves or with their parents/guardians. For a child to participate, the consent of the parents/guardians was required regardless of parents/guardians’ participation. When both the parent and the child participated, the questionnaire for the parents was administered first, followed by that for the children.

Study subjects

A total of 6,116 parents/guardians and 2,591 children participated in the survey. In this study, we focused on children who

responded to at least one of two open-ended questions (described in the section below). Among those who responded ($n = 1,337$), we excluded children who responded “no needs” or “no comments” ($n = 45$). The remaining 1,292 children (49.9% of the total child participants) made up our analytic sample (Fig. 1).

Questions in the survey

The questionnaire for children consisted of 38 questions for children and 11 demographic questions for children or parents/guardians. When a child participated alone, he/she replied to 49 questions, whereas children answered only 38 questions if their parents/guardians were involved. Of the 38 questions, 36 had multiple answer choices and pertained to life and behavior during the quarantine, psychological symptoms (depression, anxiety, and stress), wellbeing, quality of life, positive parenting, and abusive behaviors. The remaining two questions were open ended, allowing children to explore their views and opinions about what they wished to know or currently wanted (Q1) and questions or concerns about the survey (Q2).

Measurement variables

We assessed the following demographic variables among the participants: gender (male, female, other, do not want to answer), grade at school (grade 1–12, other, do not want to answer), family structure (living with both parents or not,

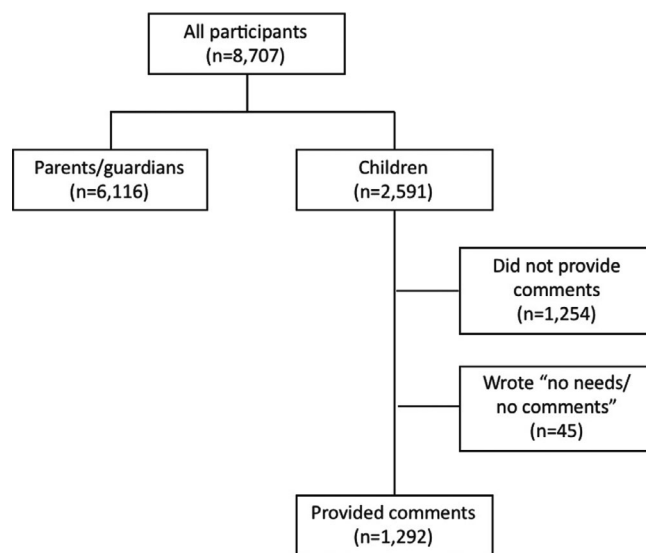


Fig. 1 Study subjects. Of the 6,116 parents/guardians and 2,591 children who participated in the survey during this study period, we focused on children who responded to at least one of the two open-ended questions. A total of 1,254 children did not provide any response to the two questions. Among those who provided comments, children who wrote either “no needs” or “no comments” were excluded ($n = 45$). The remaining 1,292 children made up our analytic sample.

number of siblings), maternal employment status, and home location (i.e., region of Japan). In Japan, grades 1–6 correspond to elementary school (ages 6–12), grades 7–9 to junior high school (ages 12–15), and grades 10–12 to high school (ages 15–18). In our study, participants were grouped into age categories according to their grade (i.e., grades 1–3, 4–6, and 7–12), since children may respond differently to questions according to developmental stage.

CRC areas investigated

Based on previous reports, we focused on the following five categories of rights defined by the CRC in this study: education, health, safety, play, and participation.^{7,8} From among the CORONA-CODOMO Survey questions that had multiple choices, this study chose 15 representing the above categories, as shown in Table 1.

Data analysis

First, we conducted descriptive analyses of our study participants and compared them with individuals who were excluded. Second, for the questions related to the rights described in the CRC, we determined the proportion that was answered in the affirmative. Finally, as the main focus of the study, we narratively reviewed all children’s direct responses to the two open-ended questions, and the first author (A.Y.) categorized

the comments according to the five CRC areas specified above. Co-authors separately reviewed each comment and selected the representative comments based on the frequency of similar comments, the relevance to the CRC, and also to reflect the responses of participants with age categories according to their grades.

Ethical considerations

The study has full ethical and data protection approved by the Institutional Review Board of the NCCHD (approval number 2020–21.) For a child to participate in the study, consent had to be obtained from both the child (aged 7–17 years) and his/her parents/guardians. Each child was ensured the opportunity not to answer the questions, or to discontinue responding at any time.

Results

Participant characteristics and proportions of affirmative answers to questions regarding rights under the CRC

Among the 2,591 children who participated, 1,292 (49.9%) gave valid responses to at least one of the two open-ended questions. Table 2 shows the demographics of the study subjects (*n* = 1,292). Overall, 63.9% of the children identified as female. The percentages of children in grades 1–3, 4–6, and

Table 1 Categories of rights outlined in the United Nations Convention on the Rights of the Child (CRC) and the related questions in the survey

Rights	Articles in the CRC	Related questions and answer choices in the survey
Education	28 (access to education) 29 (aims of education)	Please choose all that apply to your complaint: “I cannot go to school (1),” “I am worried about studying (2),” “I cannot see my friends,” “I cannot play outside,” “I cannot be physically active,” “none of the above.” Compared to last year, your study hours; “increased,” “same,” “decreased (3),” “do not know or do not want to answer.”
Health	6 (life, survival, and development) 24 (health and health services)	Please choose all that apply to what you are anxious about: “I am worried that I may catch COVID-19 (4),” “I am worried someone in my family may catch COVID-19 (5),” “I want to know more about COVID-19,” “I am really afraid of COVID-19 (6),” “none of the above.”
Safety	19 (protection from violence, abuse, and neglect)	Please choose all that apply to you at home: being “slapped (7),” “threatened/insulted (8),” “yelled at (9),” “not given necessities, such as food (10),” “none of the above.”
Play	15 (association) 31 (leisure, play, and culture)	Please choose all that apply to your complaint: “I cannot go to school,” “I am worried about studying,” “I cannot see my friends (11),” “I cannot play outside (12),” “I cannot be physically active,” “none of the above.” Communication with friends: Choose all of the following that applied to you in the last week: “face to face,” “via phone,” “via video chat,” “via text messaging,” “did not have any contact at all (13).”
Participation	12 (respect for the views of the child) 13 (freedom of expression) 17 (access to information)	Please choose all that apply to your parents/guardians: “use easy-to-understand words to explain (14),” “understand my feelings,” “always listen to me.” “making me feel easy,” “none of the above.” Please choose all that apply to what you are anxious about: “I am worried that I may catch COVID-19,” “I am worried someone in my family may catch COVID-19,” “I want to know more about COVID-19 (15),” “I am really afraid of COVID-19,” “none of the above.”

Bold text shows the 15 answer choices used for the analysis.

Table 2 Demographics of children who did or did not provide comments in the survey

			Total		Provided comments [†]		Did not provide comments		P-value [‡]	
			(n = 2,591)		(n = 1,292)		(n = 1,299)			
			n	%	n	%	n	%		
Child	Gender	Female	1,550	59.8%	825	63.9%	725	55.8%	<0.001	
		Male	978	37.7%	435	33.7%	543	41.8%		
	Grade [§]	Other/do not want to answer	63	2.4%	32	2.5%	31	2.4%		
		Grades 1–3 (ages 7–9)	631	24.4%	322	24.9%	309	23.8%		
		Grades 4–6 (ages 9–12)	1,114	43.0%	604	46.7%	510	39.3%		
Household	Parents	Grades 7–12 (ages 12–17)	676	26.1%	296	22.9%	380	29.3%	0.454	
		Other/do not want to answer	170	6.6%	70	5.4%	100	7.7%		
		Living with two parents	2,246	86.7%	1,123	86.9%	1,123	86.5%		
	Siblings	Living with one parent, other	308	11.9%	147	11.4%	161	12.4%		0.219
		Unknown/do not want to answer	37	1.4%	22	1.7%	15	1.2%		
		Only child	706	27.2%	372	28.8%	334	25.7%		
		Two children	1,312	50.6%	640	49.5%	672	51.7%		
Maternal employment	Three+ children	Three+ children	543	21.0%	266	20.6%	277	21.3%	0.048	
		Unknown/do not want to answer	30	1.2%	14	1.1%	16	1.2%		
		Full time	369	14.2%	207	15.9%	162	12.5%		
		Part-time, self-employed	1,393	53.8%	720	55.7%	673	51.8%		
Home location	Housewife, unemployed	No mother/do not want to answer	64	2.5%	35	2.7%	29	2.2%	0.345	
		Hokkaido	39	1.5%	15	1.2%	24	1.8%		
	Tohoku region	31	1.2%	13	1.0%	18	1.4%			
	Kanto region (except Tokyo)	555	21.4%	267	20.7%	288	22.2%			
	Tokyo	639	24.7%	328	25.4%	311	23.9%			
	Chubu region	139	5.4%	74	5.7%	65	5.0%			
	Kinki region	189	7.3%	98	7.6%	91	7.0%			
	Chugoku region	45	1.7%	19	1.5%	26	2.0%			
	Shikoku region	11	0.4%	5	0.4%	6	0.5%			
	Kyusyu region	80	3.1%	32	2.5%	48	3.7%			
Missing	863	33.3%	422	32.5%	422	32.5%				

[†]Children who gave valid responses to at least one of the two open-ended questions.

[‡]A χ^2 test was used to compare differences between those who provided comments and those who did not.

[§]All responses were provided by children aged 7–17 years old. Grades 1–6 correspond to elementary school (ages 7–12), grade 7–9 to junior high school (age 12–15), and grade 10–12 to high school (age 15–17).

7–12 were 24.9%, 46.7%, and 22.9%, respectively. While nearly half of the children were from Tokyo and the nearby Kanto region, there were children from 46 of the 47 prefectures in Japan. Relative to children who did not provide a valid answer to the open-ended questions, children who provided comments were more likely to be female, to be in grades 4–6, and to have mothers who worked part time or were self-employed.

Table 3 shows the proportions of affirmative answers to questions based on the rights under the CRC for all 1,292 children. While the most frequent concern for education was not being able to go to school among younger children (69.3% for grades 1–3, 67.9% for grades 4–6), for children in grades 7–12 the main worry was about having difficulty studying (67.2%, $n = 199$). Regarding health, children were more concerned that family members might be infected (78.2%, $n = 1,010$) than that they would be infected (71.3%, $n = 921$). Younger children tended to be more afraid of becoming infected. To assess children's safety, we asked whether they had experienced physical or psychological abuse at home. Overall, 9.2% ($n = 119$) said they had been threatened or

insulted, 15.9% ($n = 205$) said they had been yelled at, and 7.4% ($n = 95$) said they had been exposed to physical abuse. Children in grades 1–3 experienced each form of abuse more frequently. Not being able to see friends was the second most frequent concern of children (74.3%, $n = 960$), and younger children tend to have less contact with friends (46.3% for grades 1–3.)

Children's direct comments related to rights under the CRC

A total of 1,523 comments were obtained for the two open-ended questions. The number of comments regarding the categories of rights under the CRC is listed in Table S1, along with selected comments.

Education

There were 248 comments related to education. Fifty-seven mentioned concerns about the timing of school re-openings. Thirty-seven children expressed a wish to go to school soon.

On the other hand, some children, including those who had refused to attend school in the past, expressed concern about returning to school. Some feared becoming infected, whereas others were anxious about adapting to a new life after school reopening. Many children mentioned that they wanted to go to school not only for academic reasons but also for seasonal events (e.g., school trips and sports competitions) or club activities that would have been held if the COVID-19 pandemic had not occurred. Many older children gave comments about their upcoming entrance examinations for new schools and were worried about how they were going to be held (37 comments). Some children were concerned about the disparity in learning associated with different measures among schools; for example, one 12th-grade boy said,

I have entrance examinations this year, but our classes have been canceled. Meanwhile, other schools provide students with online classes. I am anxious that the disparity between students will widen, and I want to know what I can do about it.

Health

Among 381 comments related to health, 344 included concerns and questions about COVID-19 itself. The majority expressed a need for more information, such as when the crisis would be over or how COVID-19 could be eliminated. Some children with chronic conditions were concerned that their symptoms would be exacerbated by COVID-19. Others worried that they might be stigmatized because they had a cough or runny nose due to pre-existing medical conditions. For example:

I have asthma, a disease involving my skin, and a runny nose because of an allergy or something. I am worried that I may be bullied because others think I have COVID-19, and I am a little scared of going to school.

(Girl, 6th grade)

Many children were aware that their mental health was also threatened. Some said they wanted to know how to relax or cope with their stress.

Safety

There were 13 comments about safety, especially involving children's families. Most children did not directly mention violence, abuse, or neglect in their answers. Some children wrote that their parents were frustrated because they had to work at home and directed their stress towards their children.

Play

In response to questions about things children wanted, the majority of them ($n = 423$) mentioned objects that they could use to kill time, such as toys and video games. Forty-two comments were related to time with friends and how they

were deprived of it as a result of social distancing. An 8th-grade girl wrote:

“Please do not deprive us of time with friends.”

Some younger children wondered whether they are allowed to play outside. A few even said they were scolded by adults when they were playing in the open air.

Participation

There were 259 responses regarding our survey. When children were asked what they wanted or needed, several asked decision-makers to consider children's points of view. Younger children wanted to receive more information about COVID-19, and older children wanted to talk about education and studying. Some children also wanted to know whether they could contribute to making the situation better.

There were 67 positive comments, such as “Thank you for creating such an opportunity to hear the feelings of children” (Girl, 7th grade), suggesting that the survey gave the children a chance to express their thoughts. Some said that they had no other place where they could talk about their views and opinions. Forty-four children questioned the purpose of the questionnaire and how their voices were going to be used. Some comments were related to concerns about their privacy.

Discussion

This is one of the first web-based surveys conducted in Japan during the first peek of the COVID-19 outbreak and the national quarantine. Although some children in grades 1 (age 6) and 12 (age 18) could not be included due to ethical considerations related to age, participants from a variety of developmental stages were obtained. The characteristics of those who provided valid comments suggest that differences in age group, gender, and maternal employment status (as a possible indicator of time spent with family members and socioeconomic status) can affect children's opportunity to give their opinions.

This survey was conducted in the middle of the emergency phase and the nationwide school closure in Japan. While many studies of the pandemic have focused on vulnerable adult populations such as women, refugees, and patients with mental health disorders, children have been sidelined because they are not the center of the pandemic from a medical viewpoint.^{16–20} The current study focused on direct responses by children and provided an opportunity to shed light on the voices of children who might be underrepresented and need support to speak out.

Education (articles 28 and 29)

Our quantitative results indicated that younger children wanted to go to school while older children were worried about their education in the middle of the nationwide school closure, suggesting the need for age-appropriate support. Previous reports

Table 3 Proportions of affirmative answers regarding rights related to the CRC among children who provided comments in the survey ($N = 1,292$)

Rights [†]	Related answer choices of the survey [‡]	Total		Grade1–3		Grade4–6		Grade7–12	
		$(n = 1,292)$		$(n = 322)$		$(n = 604)$		$(n = 296)$	
		<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Education	I cannot go to school	855	66.2%	223	69.3%	410	67.9%	176	59.5%
	I am worried about studying	732	56.7%	161	50.0%	337	55.8%	199	67.2%
	Time spent for studying was decreased	281	21.7%	59	18.3%	123	20.4%	85	28.7%
Health	I am worried that I may get the coronavirus	974	75.4%	245	76.1%	468	77.5%	208	70.3%
	I am worried that a member of my family may get the coronavirus	1,068	82.7%	270	83.9%	508	84.1%	232	78.4%
Safety	The coronavirus is very scary	753	58.3%	204	63.4%	369	61.1%	141	47.6%
	I was hit or beaten (physical abuse)	104	8.0%	46	14.3%	35	5.8%	14	4.7%
	I was threatened or insulted (psychological abuse)	131	10.1%	36	11.2%	54	8.9%	29	9.8%
	I was yelled at (psychological abuse)	220	17.0%	77	23.9%	92	15.2%	36	12.2%
Play	I am not given necessities, such as food.	7	0.5%	2	0.6%	3	0.5%	2	0.7%
	I cannot meet my friends	1,013	78.4%	269	83.5%	486	80.5%	205	69.3%
	I cannot play outside	703	54.4%	189	58.7%	336	55.6%	139	47.0%
To be heard	I have not kept contact with friends	502	38.9%	149	46.3%	256	42.4%	63	21.3%
	Parents explain things with easy words	710	55.0%	199	61.8%	341	56.5%	130	43.9%
	I want to know more about the coronavirus	645	49.9%	166	51.6%	320	53.0%	131	44.3%

[†]There were 70 children who did not answer their grade.

[‡]Five categories of rights described in the CRC.

[‡]The 15 analyzed answer choices as shown in Table 1.

warned that school closures and physical distancing measures during the pandemic may disproportionately deprive children of educational opportunities.^{21,22} This is also reflected in the comments of children in our sample, mentioning the widening disparity in education among students. The direct comments also suggested that many children were concerned about being deprived of opportunities to cultivate developmental skills other than studying (specifically described in Article 29), such as social skills and peer relationships. Older children were more concerned about after-school activities, school events, and peer relationships, and younger children were especially concerned about not being able to see friends at school. Opportunities to develop age-appropriate social-emotional skills should be provided even under difficult situations.

Health (articles 6 and 24)

Our results showed that the majority of children were concerned about becoming infected, which corresponds to the findings of other surveys.^{23,24} Some children wrote that they were afraid of being infected because they would be stigmatized. As stigma and a higher perceived threat of infection are both associated with mental health dysfunction in children and adolescents,²⁵ addressing stigma in a child-friendly manner is essential.

Safety (article 19)

Previous studies showed that movement restrictions and socioeconomic decline during the pandemic increased the risk

factors for violence, exploitation, and abuse toward children.^{8,26,27} Our quantitative results showed that some children were exposed to violence at home, but there were only a few comments related to violence. Children may perceive the act of violence differently from adults, and they may have thought that there was nothing special to report in this survey. Considering that younger children were more likely to be victimized, they may also not have had words to verbalize their situations. As Article 42 states, children must know that they have the right to be protected from all forms of violence.

Play (articles 15 and 31)

The most frequent complaint shown in our quantitative results was that they could not see their friends, which is consistent with the results of other questionnaires.^{9,10} The right to play, as stipulated in Article 31, refers to children's opportunities to form friendships, which are critical for strengthening their social skills and healthy development.²⁸ We are concerned that nearly 40% of children reported that they had no contact at all with their friends; this was especially true for younger children. A report from the UK showed that 72% of children (4–10 years) and 80% of adolescents (11–16 years) communicated regularly with friends by video.²⁹ The use of digital technologies and social media in the time of COVID-19 might alleviate some of the negative impacts of physical distancing.³⁰ It is necessary to find a balance between protecting children from the risk of infection and ensuring that they have opportunities to contact and play with their friends. Universal Internet access is important in this context.

Participation

The majority of children in our sample stated that they needed more information about COVID-19. The Committee emphasized that the right to health includes access to developmentally appropriate information.^{7,31} While more than half of children said they received straightforward explanations at home, there is room for improvement in terms of providing health-related information to children. Children's open-ended comments also suggested that, amid the crisis, many felt they had no place where they could express their views and opinions or be heard. The CRC commonly refers to the three "Ps": a child has not only rights derived from their vulnerability (protection) or dependency on adults (provision), but also those that influence their lives (participation).³² This is consistent with previous findings that, when children are in vulnerable situations, their attention becomes more focused on protection and provision than on participation.³³

Feedback to children

Children are entitled to receive feedback about their views.³² We provided feedback regarding responses to our survey and related issues using the LINE application, one of the most common social networking services among children and adults in Japan (<https://www.ncchd.go.jp/news/2020/20200508.html>). As of July 2021, nearly 10,000 children and families have subscribed. They received information related to the findings of the survey, feedback from health professionals regarding participants' direct comments, information about COVID-19, child development, teleconsultation services they could use free of charge, tools for relaxation, and other matters.

To make our project more child-centered, we also tried to incorporate children's voices in subsequent surveys. In the light of our findings that children wished to participate more, we decided to add direct questions to measure child participation in the second survey, such as "Do you feel that your voice is heard by adults when they make decisions about issues related to children?" As many children asked questions about the aims of the study, we changed the expository writing for children from the second survey. The note included a statement that all children have the right to freely express their opinion on whatever matters to them. We explained that the survey aimed to analyze information and deliver it to decision-makers to inform child-related policies. We also provided a list of resources for consultation, so that children could talk about their worries if necessary.

Limitations

The study has certain limitations. First, the results cannot be generalized to the entire pediatric population in Japan. The data collection via web survey with required parental consent might limit participants to those who had stable internet access, good relationship with their parents, and willingness to express their thoughts. Thus, our participants may not represent the most

vulnerable children who cannot raise their voices. One girl noted that "[Those] who suffer the most are those without internet connection who cannot talk about their pain" (girl, 2nd grade). The study might also have preferentially included children who had a relationship with our hospital. Future studies should target a broader range of children, including those who cannot actively raise their voices. Collaboration with schools and provincial governments with technical support could enhance the generalizability of the survey. Second, although we valued the original quotations of all the children, we were only able to present some that were selected based on our narrative review. Future study needs to consider further qualitative methods such as text analysis, in-depth interviews, or focus-group interviews. Third, COVID-19 has huge economic implications for vulnerable children³⁴ but we did not have questions corresponding to the rights to social security (Article 26) or an adequate standard of living (Article 27), and very few comments from children addressed these issues. Finally, although this study focused on children's voices, their living situations varied widely depend on parental support and the socioeconomic status of the family. Future research should include the examination of the needs of both parents and children under the pandemic.

Recommendations: the rights-based approach

Previous reports suggest that a rights-based approach is critical for promoting the well-being of children during the pandemic and proposed recommendations for action.^{20,21} However, to date, there have been few recommendations built upon the direct voices of children. The authors, including pediatricians, child psychiatrists, and child psychologists, discussed and developed the recommendations for actions to be taken based on the results of the study (Table 4). These recommendations were referenced from the calls by the Committee, in April 2020,⁷ for states to respect the rights of the child in taking measures to tackle the public health threat posed by the COVID-19 pandemic, and modified to reflect the voices of children and to suit the situation of Japanese children. For instance, in response to the many comments from children who asked for concrete information about when they could go to school again, childcare professionals can provide scientific recommendations on reopening to provide children with a safe school environment.

Conclusion

Our survey revealed that the rights of the child described in the CRC, such as the rights to education, safety, health, play, and participation, are widely influenced by measures taken against COVID-19. Although further study is needed to evaluate the long-term effects of COVID-19 on the rights of children, including those who were underrepresented in this study, the voices of children reported here provide good insights into their situation amid this crisis. Professionals working with children should take vigorous measures to ensure the preservation of their rights. Any action related to children needs to be

Table 4 Recommendations for the rights-based approach to COVID-19 in pediatric settings and related quotes from the voices of children

Rights	Recommendation and quotes from children's comments
Education	Provide scientific recommendation for reopening to provide a safe environment for children at school. Help minimize disparities in supplementary learning between children, such as that involving remote and distance education. "I want to feel safe when I go to school." (Girl, 2nd grade) [†] "I have entrance examinations this year, but our classes have been canceled. Meanwhile, other schools provide students with online classes. I am anxious that the disparity between students will widen, and want to know what I can do about it." (Boy, 12th grade) [†]
Health	Ensure access to developmentally appropriate information about COVID-19 to children. Pay attention to both physical and mental symptoms of children, address what is happening to them in a comprehensive manner, and provide self-care tips such as how to manage their stress. "What is going to happen if I go to school and catch coronavirus?" (Boy, 1st grade) [†] "I want to know how to calm myself." (Boy, 7th grade) [†]
Safety	Advocate for children's right to be protected from any forms of violence. Proactively ask children about abuse, neglect, and other forms of violence at home. "My father is sometimes frustrated because he must work at home and cannot go out to drink." (Girl, 5th grade) [†] "My parents get mad at me." (Girl, 7th grade) [†]
Play	Give specific guides about where and how children can play safely. Help children and families make good use of social media and contact with important others. "Can we play outside?" (Boy, 3rd grade) [†] "When can I see my grandma and grandpa?" (Girl, 2nd grade) [†]
Participation	Always listen directly to children about what is in their best interest and give them feedback. Respect the right of all children to be heard, especially those who are often underrepresented, such as young children and children with disabilities. "Please listen to the opinion of children, not just opinion of policymakers." (Girl, 9th grade) [‡] "Who suffer the most are those without internet connection who cannot talk about their pain." (Girl, 2nd grade) [‡]

[†]Comments on question Q1) – what they wished to know or currently want.

[‡]Comments on question Q2) – questions or concerns about this survey.

considered based on their best interests, and participation as well as protection and provision.

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Author contributions

M.H., M.S., Y.O., N.S., N.M., and M.H. contributed to the conception and design of this project. A.Y., M.H., and Y.Y.

contributed to the conception and design of this study, and drafted the manuscript. Y.O. coordinated and managed data collection. A.H. contributed to the organization of qualitative data. Y.Y. performed the statistical analysis; all authors critically reviewed the manuscript and supervised the whole study process. All authors read and approved the final manuscript.

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Supporting Information

Additional Supporting Information may be found in the online version of this article at the publisher's web-site:

Table S1. Selected quotes from children's comments that are related to the rights outlined in the CRC