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### **Early View**

Original research article

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# Risk factors for long covid in previously hospitalised children using the ISARIC Global follow-up protocol: A prospective cohort study

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#### **ABSTRACT**

**Background** The long-term sequelae of coronavirus disease 2019 (Covid-19) in children remain poorly characterised. This study aimed to assess long-term outcomes in children previously hospitalised with Covid-19 and associated risk factors.

Methods This is a prospective cohort study of children (≤18 years old) admitted with confirmed Covid-19. Children admitted to the hospital between April 2, 2020 and August 26, 2020, were included. Telephone interview using the International Severe Acute Respiratory and emerging Infection Consortium (ISARIC) Covid-19 Health and Wellbeing paediatric follow-up survey. Persistent symptoms (>5 months) were further categorised by system(s) involved.

**Findings** 518 of 853 (61%) of eligible children were available for the follow-up assessment and included in the study. Median age was 10.4 years (IQR, 3–15.2) and 270 (52.1%) were girls; median follow-up since hospital discharge was 256 (223-271) days. At the time of the follow-up interview 126 (24.3%) participants reported persistent symptoms among which fatigue (53, 10.7%), sleep disturbance (36, 6.9%,) and sensory problems (29, 5.6%) were the most common. Multiple symptoms were experienced by 44 (8.4%) participants. Risk factors for persistent symptoms were: older age "6-11 years" (odds ratio 2.74 (95% confidence interval 1.37 to 5.75) and "12-18 years" (2.68, 1.41 to 5.4); and a history of allergic diseases (1.67, 1.04 to 2.67).

**Interpretation** A quarter of children experienced persistent symptoms months after hospitalization with acute covid-19 infection, with almost one in ten experiencing multi-system involvement. Older age and allergic diseases were associated with higher risk of persistent symptoms at follow-up.

#### INTRODUCTION

Emerging data suggest that a substantial proportion of people experience ongoing symptoms including fatigue and muscle weakness, breathlessness, and neurological problems more than 6 months after the acute phase of Covid-19 [1, 2]. This phenomenon is commonly referred to as 'long Covid', a term defined by patient groups, and also known as post-Covid syndrome, the post-Covid-19 condition [3] or 'Covid long-haulers [4, 5]. Recent population data from the UK reported that the highest prevalence of long Covid after 12 weeks was among those aged 25 to 34 years (18.2%) and lowest in the 2 to 11 years age bracket (7.4%) [6].

Evidence on post-acute covid condition and long term outcomes in children is still limited to small studies with more than half having at least one persisting symptom 4 months after covid-19 infection [7]. However, a recent publication from Australia suggested that only 8% of children aged 0-19 years (median 3 years) had ongoing symptoms 3-6 months after predominantly mild covid-19 infection. The limitation of the study as acknowledged by the authors was the low age range. This mandates the larger numbers inclusion particularly of older children in future studies [8].

There is a need to assess the long-term consequences of Covid-19 in paediatric populations [9], to inform clinicians, researchers and public health experts and address the impacts of this condition on those affected and their families and to inform discussions on vaccination of children. This cohort study aimed to investigate the incidence of and risk factors for long-term Covid-19 outcomes in children post-hospital discharge. We used the standardised follow-up data collection protocol developed by the International Severe Acute Respiratory and Emerging Infection Consortium (ISARIC) Global Paediatric Covid-19 follow-up working group [10].

#### **METHODS**

#### Study design, setting and participants

This is a prospective cohort study of children (≤18 years old) admitted with suspected or confirmed Covid-19 to Z.A. Bashlyaeva Children's Municipal Clinical Hospital in Moscow, Russia. This large tertiary university hospital can accommodate up to 980 children at a time and served as the primary Covid-19 hospital for children residing in Moscow city. Children admitted to the hospital during the first wave of the pandemic, between April 2, 2020 and August 26, 2020, with reverse transcriptase polymerase chain reaction (RT-PCR) confirmed

SARS-CoV-2 infection were included. The parents of these children were contacted between January 31, 2021 and February 27, 2021 to complete a follow-up survey for this study.

The acute-phase dataset included demographics, symptoms, co-morbidities, chest computer tomography (CT), supportive care, and clinical outcomes at discharge. This study was approved by the Moscow City Independent Ethics Committee (abbreviate 1, protocol number 74). Parental consent was sought during hospital admission and consent for the follow-up interview was sought via verbal confirmation during telephone interview.

Interviews were undertaken by a team of medical students with experience gained in previous Covid-19 research [2, 11] who underwent standardised training in telephone assessment, REDCap data entry and data security. Assessments were conducted via interviews with the parents/carers. Non-responders were contacted by telephone three times before considering them lost to follow-up. Information about the current condition and persisting symptoms was collected using the version 1.0 of the ISARIC COVID-19 Health and Wellbeing Follow-Up Survey for Children, to assess patients' physical and psychosocial wellbeing and behaviour, with local adaptations (addition of questions related to signs/symptoms presence which symptom duration), translated into Russian. The protocol was registered at The Open Science Framework [12]. The follow-up survey documented data on demographics, parental perception of changes in their child's emotional and behavioural status (including reasons for a change covid-19, pandemic or both), previous vaccination history, hospital stay and readmissions, mortality (after the initial index event), history of newly developed symptoms between discharge and the follow-up assessment, including symptom onset and duration, and overall health condition compared to prior to the child's Covid-19 onset (Supplementary file). To assess the prevalence of symptoms over time parents were asked the following: (a) Within the last seven days, has your child had any of these symptoms, which were NOT present prior to their Covid-19 illness? (If yes, please indicate below and the duration of the symptom/s) and (b) Please report any symptoms that have been bothering your child since discharge that are not present today. Please specify the time of onset and duration of these symptoms.

#### **Data management**

REDCap electronic data capture tools (Vanderbilt University, Nashville, TN, USA) hosted at Sechenov University and Microsoft Excel (Microsoft Corp, Redmond, WA, USA) were used for data collection, storage and management [13, 14]. The baseline characteristics, including demographics, symptoms on admission and comorbidities were extracted from EMRs and entered into REDCap.

#### **Exposure and outcome variables**

For the purposes of this study, we defined "persistent symptoms" as symptoms present at the time of the follow-up interview and lasting for over 5 months. These were subcategorised into respiratory, neurological, sensory, sleep, gastrointestinal, dermatological, cardiovascular, fatigue and musculoskeletal (**Table S1**) informed by previously published literature [15, 16] and ISARIC Global Paediatric Covid-19 follow-up working group discussions.

Allergic diseases were defined as a presence of any of the following: asthma, allergic rhinitis, eczema or food allergy. Participants age categories were based on Eunice Kennedy Shriver National Institute of Child Health and Human Development Pediatric Terminology [17]. Severe disease was defined as having received non-invasive ventilation, invasive ventilation or admission to the paediatric intensive care unit (PICU) during the hospital admission.

Health status before Covid-19 and at the time of the interview was assessed using a 0 to 100 wellness scale [18], where 0 was the worst possible health and 100 the best possible health.

#### Statistical analysis

Descriptive statistics were calculated for baseline characteristics. Continuous variables were summarised as median (with interquartile range) and categorical variables as frequency (percentage). The chi-squared test or Fisher's exact test was used for testing hypotheses on differences in proportions between groups. The Wilcoxon rank-sum test was used for testing the hypotheses on differences between groups.

We performed multivariable logistic regression to investigate associations of demographic characteristics, co-morbidities (limited to those reported in  $\geq 5\%$  of participants), presence of pneumonia during acute infection and severity of Covid-19 with persistent symptom categories presence at the time of the follow-up interview. We included all participants for whom the variables of interest were available in the final analysis, without imputing missing data. The differing denominators used indicate missing data. Odds ratios were calculated together with 95% confidence intervals (CIs).

Upset plots were used to present the coexistence of persistent symptom categories. Two-sided p-values were reported for all statistical tests, a p-value below 0.05 was considered to be statistically significant. Statistical analysis was performed using R version 3.5.1. Packages used included dplyr, lubridate, ggplots2, plotrix and UpSetR.

#### Patient and public involvement

The survey was developed by the ISARIC Global Paediatric Covid-19 follow-up working group and informed by a wide range of global stakeholders with expertise in infectious diseases, critical care, paediatrics, epidemiology, allergy-immunology, respiratory medicine, psychiatry, psychology and methodology and patient representatives. The survey was distributed to the members of the patient group and suggestions from parents/carers were implemented.

#### **RESULTS**

#### Study population

All 853 children hospitalised with suspected Covid-19 to the hospital between April 2, 2020 and August 26, 2020 were discharged alive (**Figure 1**). Of 836 patients with accurate contact information, parents of 518 RT-PCR positive children agreed to be interviewed (response rate 62%) and were included in the analysis.

The median age was 10.4 years (IQR, 3-15.2; range, 2 days—18 years), 272 (52.2%) were girls. Median follow-up time since hospital admission was 268 days (IQR 233-284). Children had a median of 8 (IQR, 4-9) years of formal school education and a median of 4 (IQR, 3-5) family members were residing in the household (**Table 1**).

The most common pre-existing comorbidity in this cohort was food allergy (13%, 67/514), followed by allergic rhinitis and asthma (9.7%, 50/514), gastrointestinal problems (9.3%, 48/514), eczema (8.8%, 45/514) and neurological problems (8.4%, 43/514). Parents of 55.3% (284/514) children did not report any comorbidities. Fever (83.6%, 427/511), cough (55.7%, 284/510), rhinorrhea (54.3%, 278/512) and fatigue (38.9%, 197/506) were the most common presenting symptoms at the time of the hospital admission (**Table S2**). 37.3%, 192/515 of patients had pneumonia during hospital stay, 2.7%, 14/515 had severe disease, which required non-invasive ventilation/invasive ventilation or admission to PICU. Treatments received during the hospital admission are presented in **Table S3**.

At the time of the follow-up interview, parents of 24.7% (128) children reported at least one persistent symptom, with fatigue 10.6% (53/496), insomnia 5.19% (26/501), disturbed smell 4.7% (22/467) and headache 3.5% (17/486) being the most common. Detailed information on symptoms and duration is presented in **Table S4**.

The prevalence of the symptoms present at the time of discharge declined over time (**Figure 2**). Number of children with fatigue fell from 15.8% (82/518) at the time of discharge to 8.8% (45/513) 6-7 months later, altered sense of smell from 8.7% (45/518) to 4.7% (24/514), sleep disturbance 7.5% (39/518) to 5.8% (30/515), altered sense of taste from 5.6% (29/518) to 3.1% (16/515), headache from 4.6% (24/518) to 3.5% (18/517), and breathing difficulties from 3.9% (20/518) to 1% (5/517), respectively. The prevalence of the most common symptoms including symptoms that developed some time after discharge are shown in **Figure S1**.

With regard to persistent symptom categories (**Table S1**), fatigue was the most commonly reported in 10.6% (53/498) of patients at the time of assessment, followed by sleep disturbance 7.2% (36/501), sensory problems 6.2% (29/467), gastrointestinal 4.4% (22/499) and dermatological 3.6% (18/496) problems. A smaller number of patients experienced neurological 3% (14/465), respiratory 2.5% (12/489), cardiovascular 1.9% (9/470) and musculoskeletal 1.8% (9/489) problems long-term.

A total of 8.5% (44) participants reported persistent symptoms from more than one category at the time of the follow-up assessment. Most commonly co-occurring categories were fatigue and sleep problems in 1.9% (10) of children, and fatigue and sensory problems were present in 1.5% (8) of participants. 2.7% (14) of children had persistent symptoms from three or more different categories. Co-existence of persistent symptom categories at the time of the follow-up is presented in the upset plot (**Figure 3**).

The scores on the wellness scale for children with one or two or more persistent symptoms significantly declined when compared to before Covid-19 onset from 90 (80-100) to 82.5 (70-93.8) and from 90 (80-95) to 70 (60-80) (p<0.001 for all comparisons), respectively. Children who did not experience any persistent symptoms did not report any significant changes in wellness when asked to compare to how they felt before their acute Covid-19 illness. We also assessed emotional difficulties, social relationships, and activity levels in children (**Tables S4 - S5**). Parents related the following changes to Covid-19 illness, and not to the pandemic in general: less eating in 4.5% (23/512) of children, less sleeping in 3.5% (18/511) and more sleeping in 2% (10/511), reduced physical activity in 4.7% (24/512) and child becoming less emotional in 4.3% (22/511). In contrast, parents attributed changes to social activities to the pandemic in general rather than to the Covid-19 illness: 12% (58/485) of children were spending less time with their friends in person, while 13% (61/470) were spending more time with friends remotely, with less than one percent of parents attributing these changes to Covid-19 illness. 23% (110/478) of children were spending more time

watching television, playing video/computer games or using social media for educational purposes, with 92.9% of parents associating these changes with the pandemic in general rather than the Covid-19 illness.

In multivariable regression analysis, older age group was associated with persistent symptoms (**Figure 4**). When compared with children under two years of ages, those ages 6-11 years had an odds ratio of 2.74 (95% confidence interval 1.37 to 5.75) of persistent symptoms and those 12-18 years of age (OR 2.68, 95% CI 1.41 to 5.4) both vs. <2 years. Another predictor associated with persistent symptoms was allergic diseases (OR 1.67, 95% CI 1.04 to 2.67). Similar patterns were seen for children with co-existence of persistent symptoms from 2 or more categories: 6-11 years of age (OR 2.49, 95% CI 1.02 to 6.72), 12-18 years of age (OR 3.18, 95% CI 1.43 to 8.11) both vs. <2 years.

We ran an additional regression analyses, using "age" as a continuous variable (**Figure S2**) which brought similar result. When subgroup analyses were performed in the age group of six years and above, severe acute Covid-19 was associated with persistent symptoms (OR 6.14, 95% CI 1.27 to 43.94) and excessive weight and obesity with co-existence of persistent symptoms from 2 or more categories (OR 2.89, 95% CI 1.12 to 7.15) (**Figure S3**).

#### **DISCUSSION**

To our knowledge, this is the largest prospective paediatric cohort study with the longest follow-up, assessing symptom prevalence and duration of long COVID in children and adolescents with laboratory confirmed SARS-CoV-2 infection post hospital discharge. We found that a quarter of children and adolescents had persistent symptoms at the time of the follow-up with fatigue, sleep disturbance and sensory problems being the most common. Almost one in ten reported multi-system impacts with two or more categories of persistent symptoms at the time of the follow-up. Children in mid-childhood and adolescence (age 6-18) were at higher risk of persistent symptoms at the time of the follow-up. Although prevalence of symptoms declined over time, a substantial proportion experienced problems many months after discharge.

Although many children experienced symptoms, such as fatigue, disturbed smell and taste, sleep and respiratory problems, hair loss and headaches at the time of the hospital discharge, we witnessed a steady decline in the symptom prevalence over time. This was particularly evident for fatigue and smell disturbance. Prevalence of some symptoms such as headache, and sleep problems declined slower, which may be driven by psychological mechanisms rather than pathophysiologic virus infection effects [19]. A limitation of these findings is that

symptom onset and duration was recalled at the single follow-up interview in our study; this may be overcome with repeated follow-ups at appropriate intervals to limit potential recall imprecision. There are very few studies assessing long COVID in children and adolescents; a previous smaller study from Italy found similar persisting symptoms during a shorter follow-up [20]. In line with our results, previous research demonstrated symptoms fading over time in adults [15] but data are still limited as most of the published cohort studies do not measure symptom duration, but rather assess their presence at a single follow-up.

We found that almost one in ten children had multisystem impacts with two or more categories of persistent symptoms present at the time of the follow-up. Similar numbers were previously reported in the Russian adult population [2] and patients with clusters of different symptoms were described in the UK [21]. Patients with multisystem involvement will represent the primary target for the future research and intervention strategies development.

Age was significantly associated with persistent symptom presence at the time of the follow-up, with children above 6 years of age being at higher risk. To our knowledge, risk factors for long Covid in children have not been investigated in previous studies, so we may draw comparisons with the data from adult cohorts only. Previous data suggest that long Covid is prevalent in adults [1, 2, 21-24] and that age is associated with a higher risk of long Covid [21, 23]. An Australian follow-up study of 151 children (median 3 years) who had predominantly mild acute covid-19 infection [8] found only 8% with on-going long-covid symptoms. As acknowledged by the authors the low median age may be the main reason for the low long-covid prevalence and our study substantiates this. We also found that in children of six years of age and above, severe acute Covid-19 was associated with persistent symptoms and excessive weight and obesity with multisystem involvement, but confidence intervals were wide and these findings require confirmation on a larger sample size to make any firm conclusions.

We found that allergic diseases in children were also associated with a higher risk of long Covid. This is in agreement with adult studies from Russia [2] and the UK [21] reporting asthma to be associated with development of long Covid. Recent data suggested that COVID-19 consequences may be linked with the mast cell activation syndrome [25] and the Th-2 biased immunological response in children with allergic diseases may be responsible for an increased risk of long-term consequences from the infection. This highlights importance of further research of potential underlying immunological and autoimmune mechanisms of long Covid [26].

Apart from physical symptoms we assessed emotional and behavioural changes. Although most parents reported no changes, one in twenty parents noticed changes in their children, which they attributed to Covid-19 illness rather than the general situation during the pandemic. These included changes in eating, sleeping, emotional wellbeing and physical activities. Over one in ten parents noted that their children were spending less time in face-to-face communication and more time interacting with their friends remotely and spending time online for both educational and non-educational purposes. These changes were largely attributed to the general situation during the pandemic rather than to the Covid-19 illness. The "lockdown" measures were implemented in Moscow in the middle of March and lasted until June 2020. Restrictions included self-isolation, public places closures, including schools/universities social distancing, etc. Pandemic resulted in increased anxiety levels among population, which was associated with increased media consumption [27]. The effect of pandemic, illness or both should be further studied in the future research.

A major strength of this study is that it was based on the ISARIC COVID-19 Health and Wellbeing Follow-Up Survey for Children which will assist with data harmonisation and comparison with other international studies in the future. Another strength is the large sample size of confirmed Covid-19 infected children, and this cohort has the longest followup assessment of hospitalised children to date. Stratification to determine if the symptoms were persistent following Covid-19 and assessment of trends over time were other novel aspects of the study. At the same time, this cohort study has several limitations. First, the study population only included patients within Moscow, although regional clustering is common to many cohort studies published during the Covid-19 pandemic. Second, it included only hospitalised children, not representative of paediatric population. Third, we did not have a control group of previously hospitalised children not experiencing Covid-19 infection. Fourth, some patients may have developed additional comorbidities or complications since the hospital discharge, which were not appropriately captured and could potentially affect the wellbeing and symptom prevalence and persistence. Fifth, the parents/caregivers were interviewed in this study and not children themselves. There is also a risk of selection bias due to recruitment of the hospitalised population and recall bias in reporting symptoms which were non-existent at the time of the follow-up and potential selection bias with those with symptoms more likely to agree to survey.

The study used to generate this data within the ISARIC WHO Clinical Characterisation Protocol initiative is a prospective pandemic preparedness protocol which is agnostic to disease and has a pragmatic design to allow recruitment during pandemic conditions. The reality of conducting research in outbreak conditions do not allow for appropriate coenrolment of a control group, which is not practical. One of the issues which has not been addressed so far in clinical research is what control group of individuals admitted to hospital during this period when hospitals were overwhelmed with Covid-19 cases could provide a valid control group. The design of this study allows only to describe the feature of Covid-19 survivors and cannot involve a control group. Covid-19 is not just a respiratory tract infection so there is no one-fit-all control group. At present, to our knowledge, all major publications on long Covid are uncontrolled cohorts due to the difficulties of ascertaining data among controls matched for age and sex but most importantly matched for the same experiences during the pandemic aside from confirmed Covid-19 illness.

Our findings have implications for further research. Longer follow-up duration and repeated assessments combined with controls and sampling for further studies into the pathophysiology and immunology of post-Covid-19 illness sequelae are needed to inform case definitions, and intervention trials aimed to improve long term outcomes.

#### Conclusion

Although symptoms which were present at discharge diminished over time, even eight months after hospital discharge many children experienced persistent symptoms, with fatigue, sensory changes and sleep problems being the most common sequelae. One in ten children experienced multi-system involvement at the time of the follow-up. Age and allergic disease were the main risk factors for persistent symptoms. Future work should be multidisciplinary, prospective, preferably with a control cohort, repeated sampling and with an ability for children to report their health and wellbeing themselves, accompanied by biological sample collection to establish causative mechanisms for a better understanding of Covid-19 sequelae and help with the phenotype/endotype categorisation.

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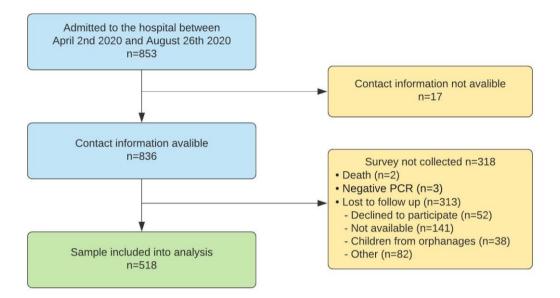
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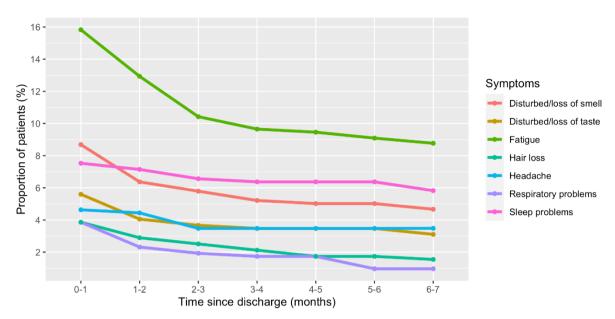
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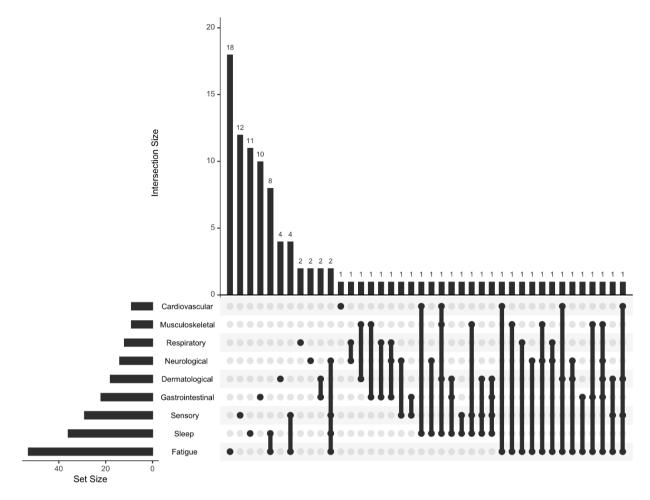
#### **Figures**



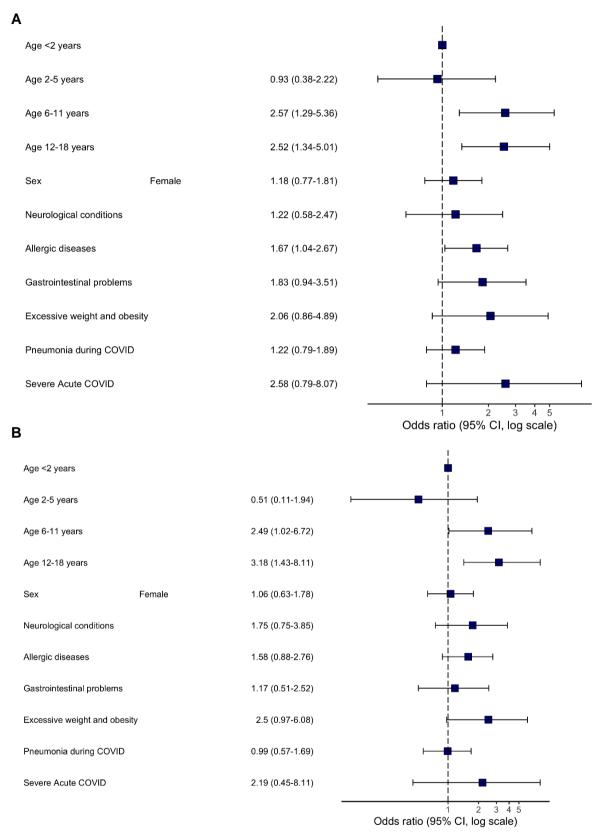
**Figure 1.** Flow diagram of patients with COVID-19 admitted to Z.A. Bashlyaeva Children's Municipal Clinical Hospital between April 2, 2020 and August 26, 2020. "Other" includes relatives unable to describe child health; relatives not willing to refer interviewers to the child parents/carers; inability to speak Russian.



**Figure 2.** Duration of the most common symptoms (post-discharge) in children who experienced symptoms at the time of discharge. The calculations are based on responses to the following questions: "Within the last seven days, has your child had any of these symptoms, which were NOT present prior to their Covid-19 illness? (If yes, please indicate below and the duration of the symptom/s) and "Please report any symptoms that have been bothering your child since discharge that are not present today. Please specify the time of onset and duration of these symptoms."



**Figure 3.** Upset plot representing coexistence of the persistent symptom (present at the time of the follow-up interview and lasting for over 5 months) categories at the follow-up assessment. The values represent the number of individuals experiencing a persistent symptom category or combination of categories. Black lines link multiple symptoms indicated by black dots.



**Figure 4.** Multivariable logistic regression model to identify pre-existing risk factors for post-COVID condition. Odds ratios and 95% CIs for presence of (A) any category of persistent symptoms (n=127) at the time of follow-up and (B) two or more co-existing categories of persistent symptoms (n=73) at the time of the follow-up. Neurological conditions include "neurological disorders" and/or "neurodisability". Abbreviation: CI, confidence interval.

Characteristics	Total
Sex, female	270/518 (52.1%)
Age at the time of hospital admission, years (median, IQR)	10.4
Age (categorical), years	(3-15.2)
<2	105 (20.3%)
2 – 5	80 (15.4%)
6 – 11	113 (21.8%)
12 – 18	220 (42.5%)
Days from discharge to follow-up (median, IQR)	256 (223-271)
Length of hospital admission (days, median, IQR)	10 (7-14)
Number of years of formal school education (median, IQR)	8 (4-9)
Number of members in household (median, IQR)	4 (3-5)
Pneumonia during hospitalisation	192/515 (37.3%)
Severe disease (non-invasive ventilation or invasive ventilation or PICU)	14/515 (2.7%)
Comorbidities	1,0-0 (=-,)
Neurological conditions	45/514 (8.8%)
Neurological disorders Neurodisabilitu	43/514 (8.4%) 11/514 (2.1%)
1veurousability	11/514 (2.1/0)
Heart diseases	21/514 (4.1%)
Haematological conditions	10/514 (1.9%)
Tuberculosis	9/514 (1.8%)
Respiratory diseases (not including asthma)	16/514 (3.1%)
Allergic diseases†	121/514 (23.5%)
Food Allergy Allergic Rhinitis Eczema Asthma (doctor diagnosed)	67/514 (13%) 46/514 (8.9%) 45/514 (8.8%)
Other skin problems (not including eczema)	12/514 (2.3%) 8/514 (1.6%)
Gastrointestinal problems	48/514 (9.3%)
Oncological conditions	3/514 (0.6%)
Immune system diseases	6/514 (1.2%)
Genetic conditions	6/514 (1.2%)
Diabetes*	3/514 (0.6%)
Other endocrine illness (not diabetes)	12/514 (2.3%)
Renal/Kidney problems	18/514 (3.5%)
Excessive weight and obesity	25/514 (4.9%)
Malnutrition	10/514 (1.9%)
Rheumatological conditions	4/514 (0.8%)
Depression	4/514 (0.8%)
Anxiety	5/514 (1%)
HIV	0 (0%)
No comorbidities	284/514 (55.3%)
One comorbidity	141/514 (27.4%)
Two comorbidities or more	89/514 (17.3%)
1 WO COMOLDIGITIES OF MOLE	09/514 (17.3%)

**Table 1.** Demographic characteristics of patients admitted to the Z.A. Bashlyaeva Children's Municipal Clinical Hospital. Data are n (%) or median (IQR) excluding missing values. \*All cases of diabetes were type 1. †Allergic diseases include asthma, allergic rhinitis, food allergy and eczema.

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Figure S1. The proportion of COVID-19 infected children who at various time points after discharge from hospital had one or more of the commonest continuing symptoms. Some children had more than one symptom
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Figure S3. Multivariable logistic regression model to identify pre-existing risk factors for post-COVID condition (subgroup analyses in children ≥6 years of age). Odds ratios and 95% CIs for presence of (A) any category of persistent symptoms at the time of follow-up and (B) two or more co-existing categories of persistent symptoms at the time of the follow-up

### Case Report Form (CRF) of Initial Survey: First Follow-Up Time Point version 1.0

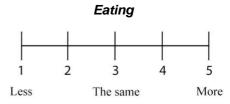
The questions were answered by the:
Date you completed the survey (DD/MM/YYYY): [_D_][_D_]/[_M_][_M_]/[_2_][_0_][_Y_][_Y_]
What is your child's date of birth (DD/MM/YYYY): [_D_][_D_]/[_M_][_M_]/[_Y_][_Y_][_Y_]
1. About your child
Sex/Gender:   Male   Female   Prefer not to say
What is your child's estimated height (cm): Not sure
What is your child's current estimated weight (kg):   Not sure
What was your child's estimated weight before Covid19 illness (kg):   Not sure
How many other members regularly live in your household, including yourself: [_Number_]
Does your child study in school/college/university? □ Yes □ No
How many years formal school education has your child had?* [_Number_]
*including primary school (e.g. from around 6 years depending on country)
Does your child study in kindergarten? □ Yes □ No
2. About <u>your child's</u> Covid-19 illness - all the questions relate to his/her health and wellbeing)
Approximately, what day did you first notice your child was experiencing symptoms of Covid-19? [_D_]/[_M_][_M_]/[_2_][_0_][_Y_][_Y_]
How was your child diagnosed with Covid-19?
□ Laboratory confirmed (positive PCR, antigen or Antibody test) □ Physician confirmed □ Test result is uncertain
■ Not sure  Estimated date of your child's most recent positive SARS-CoV-2 /Covid-19 test:  [_D_][_D_]/[_M_][_M_]/[_2_][_0_][_2_][_Y_]  Indicate if □PCR test □ Antibody test □ Unknown  Has your child been admitted to hospital due to Covid-19? □ Yes □ No  (If the answer is "no", please, move on to the section "3"; if the answer is "yes", please, proceed with the
following questions)
• Roughly at what date was your child first admitted to hospital?  [_D_][_D_]/[_M_][_M_]/[_2_][_O_][_Y_][_Y_]
<ul> <li>Roughly at what date was your child first discharged from hospital?</li> <li>[_D_][_D_]/[_M_][_M_]/[_2_][_0_][_Y_][_Y_]</li> </ul>
• If yes did they spent any time in the Paediatric Intensive Care Unit (PICU)? ☐ Yes ☐ No ☐ Not sure
• Has your child been admitted to hospital after the first acute Covid-19 illness? ☐ Yes ☐ No
If yes, how many times: [_Number_]
Name of hospital/hospitals:
If yes, specify reason/reasons:

#### 3. About your child's emotional wellbeing, social relationships and activities'

To answer the following questions, please **mark an X** on the lines below that shows your opinion on the question.

### A. Compared to before your child's Covid-19 infection, how much is he/she now doing/experiencing the following

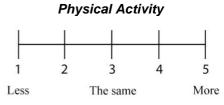
If there are changes, please indicate whether you think these are due to the illness itself or to the Covid-19 pandemic



■ Not known

If there are changes, please indicate whether you think these are due to

□ Illness itself □ Covid-19 pandemic □ Both □ Unsure

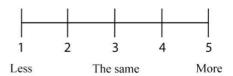


■ Not known

If there are changes, please indicate whether you think these are due to

□ Illness itself □ Covid-19 pandemic □ Both □ Unsure

#### Spending time with friends in-person

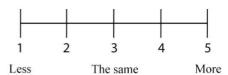


□ Not known

If there are changes, please indicate whether you think these are due to

□ Illness itself □ Covid-19 pandemic □ Both □ Unsure

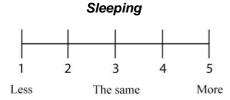
# Spending time watching TV, playing video/computer games, or using social media <u>for educational purposes</u>, including school/nursery work



□ Not known

If there are changes, please indicate whether you think these are due to

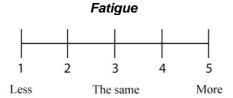
□ Illness itself □ Covid-19 pandemic □ Both □ Unsure



■ Not known

If there are changes, please indicate whether you think these are due to

□ Illness itself □ Covid-19 pandemic □ Both □ Unsure

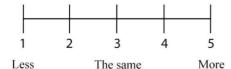


■ Not known

If there are changes, please indicate whether you think these are due to

□ Illness itself □ Covid-19 pandemic □ Both □ Unsure

### Spending time with friends remotely (e.g., online, social media, texting)

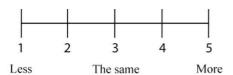


□ Not known

If there are changes, please indicate whether you think these are due to

□ Illness itself □ Covid-19 pandemic □ Both □ Unsure

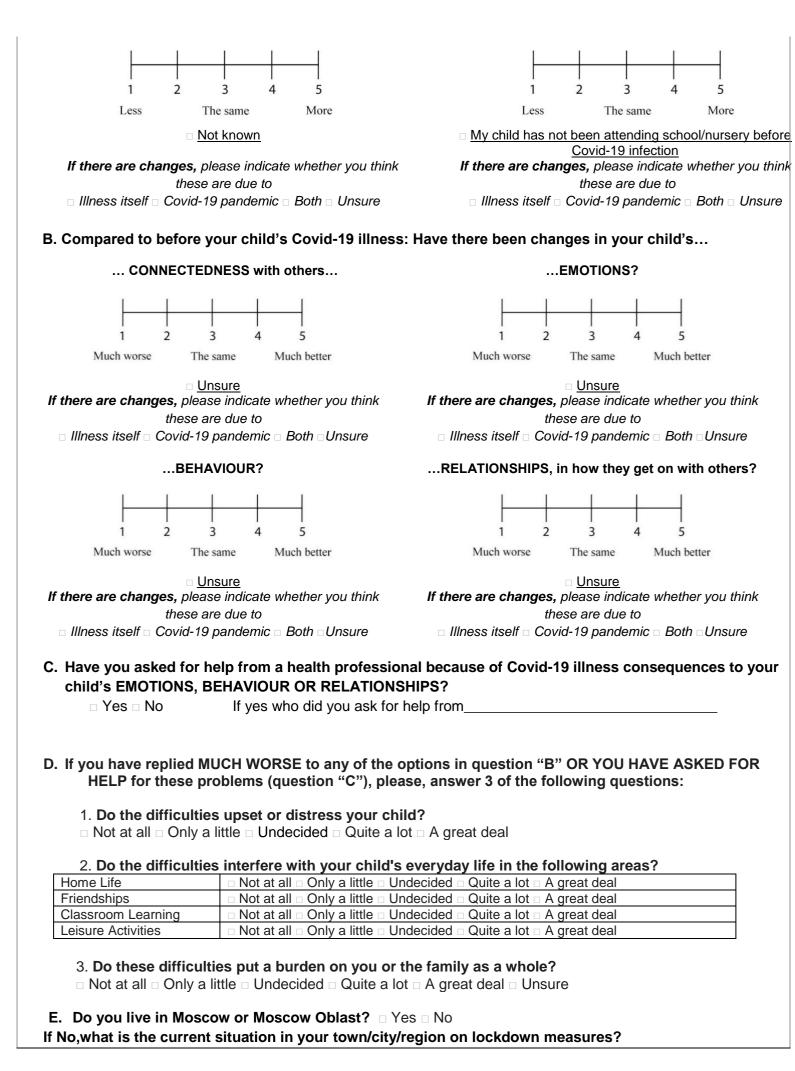
# Spending time watching TV, playing video/computer games, or using social media for non-educational purposes,



□ Not known

If there are changes, please indicate whether you think these are due to

□ Illness itself □ Covid-19 pandemic □ Both □ Unsure



<ul> <li>(you may select more than one answer)</li> <li>□ Closing of child's school</li> <li>□ Closing of non-essential shops (shops and stores apart from food, doctors and drug stores)</li> <li>□ Closing of indoor places/venues</li> <li>□ Constraining meeting friends</li> </ul>	<ul> <li>□ Closing of nurseries/kii</li> <li>□ Cancellation/closing of activities</li> <li>□ Closing of outdoor recr</li> <li>□ Stay-at-home orders (rexcept for essential errare</li> </ul>	recreational ver reational places not allowed to le	;
4a. About your child's state of health prior to his/her	Covid-19 illness		
Has your child been <u>physician's diagnosed or received</u> medical conditions prior to the Covid-19 infection? (an		-	owing chronic
medical conditions prior to the oovid-13 infection: [all	Yes		Unknown
Prematurity (baby born <37 weeks)	163	110	Olikilowii
Neurological			
Neurodisability			
Heart diseases			
Respiratory diseases (not including asthma)			
Tuberculosis			
Asthma (doctor's diagnosed)			
Allergic rhinitis/hay fever			
Food allergy			
Atopic dermatitis/Eczema			
Other skin problems (not including eczema)			
Gut problems			
Haematology (blood diseases)			
Oncology (cancer or other progressively enlarging or spreading	fumor)		
Immune system diseases (e.g. primary immune deficiencies)	is in the second		
Genetic conditions			
Diabetes (if yes indicate type: □ Type 1 □ Type 2)			
Other endocrine illness (not diabetes)			
Renal/Kidney problems			
Excessive weight and obesity			
Malnutrition (deficiencies, excesses, or imbalances in a person's			
intake of energy and/or nutrients)			
Rheumatology (e.g. arthritis, or inflammation of the joints)			
Depression			
Anxiety			
HIV			
Other (please indicate)		•	
Has your child ever been under Child and Adolescent pandemic?   Prior to Covid-19 infection, how was your child's phy  Very poor Poor Ok Good Very good  If you ticked poor or very poor, please explain:	<u>sical health</u> in general?		vid-19
Prior to Covid-19 infection, how would you describe you	ur child's <u>mental health</u> i	n general	
□ Very poor □ Poor □ Ok □ Good □ Very good			
If you ticked poor or very poor, please			
explain:			

Have you requested help because of C	ovid-19 c	onsequ	ences to your child's physical he	alth?	
□ Yes □ No □ Not sure					
4b. About your child's current health					
Has your child felt feverish recently?  If yes indicate when they felt feverish  Within the last 7 days = >1-2 weeks =	tick all	that app	ly)	onths	
□ >6 months ago					
If yes, what was the most likely cause	of your	child'e n	nost recent feverish illness?		
	•				
□ Covid-19 □ Other respiratory infection			•		
(diarrhea/vomiting)   Urinary infection	□ Other (	specity):			
□ Unknown □ Prefer not to say					
If Covid-19, what was the estimated da	te of the	most re	cent positive SARS-CoV-2 /Covid	1-19 test?	)
[_D_][_D_]/[_M_][_M_]/[_2_][_0_][_2_][_Y Indicate if _PCR test _ Antibody test _ U					
"My child has fully recovered from Control Please mark an X on the line below that the line below the	at shows y		nion on the question as of <b>TODAY</b> 8 9 10  Strongly agree		
5. Since having Covid-19, has your or answer in the box provided)	child beer	n diagno	sed with any of the following? (i	ndicate tl	ne correct
	YES	NO		YES	NO
Multisystem inflammatory syndrome			Shock / Toxic shock syndrome		
Pulmonary embolism			Coagulopathy		
(PE, "Clot in lung")			(excessive bleeding or clotting)		
Kawasaki disease			Kidney problems		
Multisystem inflammatory syndrome (MIS-C/PIMS-TS)			Type 1 Diabetes		
Respiratory failure			Type 2 Diabetes		
Asthma			Intussusception		
Myocarditis (inflammation of the heart muscle)			Other condition (if yes specify):		

6a. Within the <u>last seven days</u>, has your child had any of these symptoms, which were NOT present prior to their Covid-19 illness? If yes, please indicate below and the duration of the symptom/s:

Respiratory problems	Tick Yes or No	If yes, what is the duration of symptoms
Nasal congestion / rhinorrhea	□ Yes □ No	$\square$ < 1 month $\square$ 1-2 months $\square$ >2 -3 months $\square$ >3-4 months $\square$ >4-5 months
		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge
		□ Not sure
Difficulty breathing /chest tightness	□ Yes □ No	$\square$ < 1 month $\square$ 1-2 months $\square$ >2 -3 months $\square$ >3-4 months $\square$ >4-5 months
		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge
		□ Not sure
Pain on breathing	□ Yes □ No	$\square$ < 1 month $\square$ 1-2 months $\square$ >2 -3 months $\square$ >3-4 months $\square$ >4-5 months
		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge
		□ Not sure
Chest pain	□ Yes □ No	□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months
		□ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge
Densistant sevel	Waa Na	□ Not sure
Persistent cough	□ Yes □ No	□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months     □ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge □ Not sure
If you - dry ooyah - with phloam	<u> </u>	Not suite
If yes, □ dry cough □ with phlegm	Tiels Vee er Ne	If year what is the duration of symptoms
Musculoskeletal problems	Tick Yes or No	If yes, what is the duration of symptoms
Cannot fully move or control movement	□ Yes □ No	□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months
		□ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge □ Not sure
Problems with balance	□ Yes □ No	□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months
Problems with balance	□ 168 □ INO	< 1 month   1-2 months   >2 -3 months   >3-4 months   >4-5 months   >4-5 months   >5-6 months   >6-7 months   >7 -8 months   >8-9 months   >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge
		□ Not sure
Persistent muscle pain	□ Yes □ No	□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months
1 orostone maddio pain		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge
		□ Not sure

Joint pain or swelling	□ Yes □ No	□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months □ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months □ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge □ Not sure
Neurological problems	Tick Yes or No	If yes, what is the duration of symptoms
Headache	□ Yes □ No	<pre>- &lt; 1 month - 1-2 months -&gt; 2 -3 months -&gt; 3-4 months -&gt; 4-5 months -&gt; 5-6 months -&gt; 6-7 months -&gt; 7 -8 months -&gt; 8-9 months -&gt; 9 -10 months -&gt; 10-11 months -&gt; 11 -12 months -&gt; 12 months -&gt; From the time of discharge -&gt; Not sure</pre>
Dizziness/ light headedness	□ Yes □ No	<pre>- &lt; 1 month - 1-2 months -&gt; 2 -3 months -&gt; 3-4 months -&gt; 4-5 months -&gt; 5-6 months -&gt; 6-7 months -&gt; 7 -8 months -&gt; 8-9 months -&gt; 9 -10 months -&gt; 10-11 months -&gt; 11 -12 months -&gt; 12 months -&gt; From the time of discharge -&gt; Not sure</pre>
Fainting/ blackouts	□ Yes □ No	<pre></pre>
Problems seeing/blurred vision	□ Yes □ No	□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months □ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months □ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge □ Not sure
Disturbed smell	□ Yes □ No	□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months □ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months □ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge □ Not sure
Loss of smell	□ Yes □ No	□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months □ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months □ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge □ Not sure
Disturbed taste	□ Yes □ No	□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months □ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months □ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge □ Not sure
Loss of taste	□ Yes □ No	□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months □ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months □ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge □ Not sure
Tremor/shakiness	□ Yes □ No	□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months □ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months □ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge □ Not sure
Tingling feeling/ "pins and needles"	□ Yes □ No	□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months □ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months

		□ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge □ Not sure
Seizures/fits	□ Yes □ No	□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months □ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months □ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge □ Not sure
Confusion/lack of concentration	□ Yes □ No	□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months □ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months □ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge □ Not sure
Problems speaking or communicating	□ Yes □ No	□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months □ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months □ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge □ Not sure
Insomnia (hard to fall asleep, hard to stay asleep)	□ Yes □ No	□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months □ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months □ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge □ Not sure
Hypersomnia (excessive daytime sleepiness or prolonged nighttime sleep)	□ Yes □ No	<pre></pre>
Fatigue	□ Yes □ No	□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months □ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months □ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge □ Not sure
Gastrointestinal problems	Tick Yes or No	If yes, what is the duration of symptoms
Weight loss	□ Yes □ No	□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months □ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months □ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge □ Not sure
Problems swallowing or chewing	□ Yes □ No	<pre></pre>
Poor appetite	□ Yes □ No	□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months □ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months □ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge □ Not sure
Diarrhea	□ Yes □ No	□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months □ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months □ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge □ Not sure

Stomach/ abdominal pain	□ Yes □ No	□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months     □ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months     □ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge     □ Not sure
Feeling nauseous	□ Yes □ No	<pre>- &lt; 1 month - 1-2 months -&gt; 2 -3 months -&gt; 3-4 months -&gt; 4-5 months -&gt; 5-6 months -&gt; 6-7 months -&gt; 7 -8 months -&gt; 8-9 months -&gt; 9 -10 months -&gt; 10-11 months -&gt; 11 -12 months -&gt; 12 months -&gt; From the time of discharge -&gt; Not sure</pre>
Vomiting	□ Yes □ No	<pre>- &lt; 1 month - 1-2 months - &gt;2 -3 months - &gt;3-4 months - &gt;4-5 months - &gt;5-6 months - &gt;6-7 months - &gt;7 -8 months - &gt;8-9 months - &gt;9 -10 months - &gt;10-11 months - &gt;11 -12 months - &gt;12 months - From the time of discharge - Not sure</pre>
Constipation	□ Yes □ No	□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months     □ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months     □ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge     □ Not sure
Cardiovascular problems	Tick Yes or No	If yes, what is the duration of symptoms
Palpitations (heart racing)	□ Yes □ No	□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months □ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months □ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge □ Not sure
Variations in heart rate (tachycardia or bradycardia)	□ Yes □ No	□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months □ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months □ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge □ Not sure
Bleeding	□ Yes □ No	<pre>- &lt; 1 month - 1-2 months - &gt;2 -3 months - &gt;3-4 months - &gt;4-5 months - &gt;5-6 months - &gt;6-7 months - &gt;7 -8 months - &gt;8-9 months - &gt;9 -10 months - &gt;10-11 months - &gt;11 -12 months - &gt;12 months - From the time of discharge - Not sure</pre>
If yes, specify bleeding site:		
Genitourinary problems	Tick Yes or No	If yes, what is the duration of symptoms
Urination problems	□ Yes □ No	□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months     □ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months     □ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge     □ Not sure
Changes in menstruation, (if regular before Covid- 19 illness)	□ Yes □ No □ Not applicable	□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months     □ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months     □ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge     □ Not sure
Other problems	Tick Yes or No	If yes, what is the duration of symptoms
Bilateral conjunctivitis  If yes,  purulent  non-purulent	□ Yes □ No	$_{ }$ < 1 month $_{ }$ 1-2 months $_{ }$ >2 -3 months $_{ }$ >3-4 months $_{ }$ >4-5 months $_{ }$ >5-6 months $_{ }$ >6-7 months $_{ }$ >7 -8 months $_{ }$ >8-9 months $_{ }$ >9 -10 months

		□ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge □ Not sure
Lumps or rashes (purple/pink) on toes	□ Yes □ No	□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months □ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months □ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge □ Not sure
Skin rash	□ Yes □ No	□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months     □ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months     □ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge     □ Not sure
Skin rash If yes, tick all body areas that apply:	□ Yes □ No	□ Face □ Trunk (stomach or back) □ Arms □ Legs □ Buttocks □ Toes □ Fingers □ Accompanied by itch
Hair loss	□ Yes □ No	< 1 month = 1-2 months = >2 -3 months = >3-4 months = >4-5 months >5-6 months = >6-7 months = >7 -8 months = >8-9 months = >9 -10 months >10-11 months = >11 -12 months = >12 months = From the time of discharge Not sure
Hyperhidrosis	□ Yes □ No	□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months     □ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months     □ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge     □ Not sure
Other New Symptoms, if yes, specify all with t	heir duration:	If yes, what is the duration of symptoms
		<pre>- &lt; 1 month - 1-2 months - &gt;2 -3 months - &gt;3-4 months - &gt;4-5 months - &gt;5-6 months - &gt;6-7 months - &gt;7 -8 months - &gt;8-9 months - &gt;9 -10 months - &gt;10-11 months - &gt;11 -12 months - &gt;12 months - From the time of discharge - Not sure</pre>
		<pre>- &lt; 1 month = 1-2 months = &gt;2 -3 months = &gt;3-4 months = &gt;4-5 months - &gt;5-6 months = &gt;6-7 months = &gt;7 -8 months = &gt;8-9 months = &gt;9 -10 months - &gt;10-11 months = &gt;11 -12 months = &gt;12 months = From the time of discharge - Not sure</pre>

# 6b. Please report any symptoms that have been bothering your child since discharge that are not present today. Please specify the time of onset and duration of these symptoms

Respiratory problems	Tick Yes or No	If yes, what was the time of onset
Nasal congestion / rhinorrhea	□ Yes □ No	□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months □ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months □ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge □ Not sure
		If yes, what was the duration of symptoms
		□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months     □ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months     □ >10-11 months □ >11 -12 months □ >12 months □ Not sure
Difficulty breathing /chest tightness	□ Yes □ No	If yes, what was the time of onset
		<pre>- &lt; 1 month - 1-2 months - &gt;2 -3 months - &gt;3-4 months - &gt;4-5 months - &gt;5-6 months - &gt;6-7 months - &gt;7 -8 months - &gt;8-9 months - &gt;9 -10 months - &gt;10-11 months - &gt;11 -12 months - &gt;12 months - From the time of discharge - Not sure</pre>
		If yes, what was the duration of symptoms
		□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months     □ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months     □ >10-11 months □ >11 -12 months □ >12 months □ Not sure
Pain on breathing	□ Yes □ No	If yes, what was the time of onset
S		<pre>□ &lt; 1 month □ 1-2 months □ &gt;2 -3 months □ &gt;3-4 months □ &gt;4-5 months □ &gt;5-6 months □ &gt;6-7 months □ &gt;7 -8 months □ &gt;8-9 months □ &gt;9 -10 months □ &gt;10-11 months □ &gt;11 -12 months □ &gt;12 months □ From the time of discharge □ Not sure</pre>
		If yes, what was the duration of symptoms
		□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months     □ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months     □ >10-11 months □ >11 -12 months □ >12 months □ Not sure
Chest pain	□ Yes □ No	If yes, what was the time of onset
		<pre>- &lt; 1 month - 1-2 months - &gt;2 -3 months - &gt;3-4 months - &gt;4-5 months - &gt;5-6 months - &gt;6-7 months - &gt;7 -8 months - &gt;8-9 months - &gt;9 -10 months - &gt;10-11 months - &gt;11 -12 months - &gt;12 months - From the time of discharge - Not sure</pre>
		If yes, what was the duration of symptoms
		□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months     □ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months     □ >10-11 months □ >11 -12 months □ >12 months □ Not sure
Persistent cough	□ Yes □ No	If yes, what was the time of onset
		$_{\square}$ < 1 month $_{\square}$ 1-2 months $_{\square}$ >2 -3 months $_{\square}$ >3-4 months $_{\square}$ >4-5 months $_{\square}$ >6-7 months $_{\square}$ >7 -8 months $_{\square}$ >8-9 months $_{\square}$ >9 -10 months

		□ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge
		□ Not sure  If yes, what was the duration of symptoms
		$\square$ < 1 month $\square$ 1-2 months $\square$ >2 -3 months $\square$ >3-4 months $\square$ >4-5 months
		□ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ Not sure
If yes, □ dry cough □ with phlegm		
Musculoskeletal problems	Tick Yes or No	If yes, what was the time of onset
Cannot fully move or control movement	□ Yes □ No	$\square$ < 1 month $\square$ 1-2 months $\square$ >2 -3 months $\square$ >3-4 months $\square$ >4-5 months
damot rany move or control movement		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge
		□ Not sure
		If yes, what was the duration of symptoms
		$\square$ < 1 month $\square$ 1-2 months $\square$ >2 -3 months $\square$ >3-4 months $\square$ >4-5 months
		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ Not sure
Problems with balance	□ Yes □ No	If yes, what was the time of onset
		$\square$ < 1 month $\square$ 1-2 months $\square$ >2 -3 months $\square$ >3-4 months $\square$ >4-5 months
		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge
		□ Not sure
		If yes, what was the duration of symptoms
		$\square$ < 1 month $\square$ 1-2 months $\square$ >2 -3 months $\square$ >3-4 months $\square$ >4-5 months
		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ Not sure
Persistent muscle pain	□ Yes □ No	If yes, what was the time of onset
		$\square$ < 1 month $\square$ 1-2 months $\square$ >2 -3 months $\square$ >3-4 months $\square$ >4-5 months
		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge
		Not sure
		If yes, what was the duration of symptoms   □ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months
		□ < 1 months □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-3 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ Not sure
Joint pain or swelling	□ Yes □ No	If yes, what was the time of onset
contribution swelling		$\square$ < 1 month $\square$ 1-2 months $\square$ >2 -3 months $\square$ >3-4 months $\square$ >4-5 months
		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge
		□ Not sure
		If yes, what was the duration of symptoms
		$\square$ < 1 month $\square$ 1-2 months $\square$ >2 -3 months $\square$ >3-4 months $\square$ >4-5 months
		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ Not sure

Neurological problems	Tick Yes or No	If yes, what was the time of onset
Headache	□ Yes □ No	$\square$ < 1 month $\square$ 1-2 months $\square$ >2 -3 months $\square$ >3-4 months $\square$ >4-5 months
		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge
		□ Not sure
		If yes, what was the duration of symptoms
		$\square$ < 1 month $\square$ 1-2 months $\square$ >2 -3 months $\square$ >3-4 months $\square$ >4-5 months
		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ Not sure
Dizziness/ light headedness	□ Yes □ No	If yes, what was the time of onset
		$\square$ < 1 month $\square$ 1-2 months $\square$ >2 -3 months $\square$ >3-4 months $\square$ >4-5 months
		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge
		□ Not sure
		If yes, what was the duration of symptoms
		$\square$ < 1 month $\square$ 1-2 months $\square$ >2 -3 months $\square$ >3-4 months $\square$ >4-5 months
		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ Not sure
Fainting/ blackouts	□ Yes □ No	If yes, what was the time of onset
		$\square$ < 1 month $\square$ 1-2 months $\square$ >2 -3 months $\square$ >3-4 months $\square$ >4-5 months
		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge
		□ Not sure
		If yes, what was the duration of symptoms
		□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months
		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months
D 11	N/ NI	□ >10-11 months □ >11 -12 months □ >12 months □ Not sure
Problems seeing/blurred vision	□ Yes □ No	If yes, what was the time of onset
		□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months
		□ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge
		Not sure
		If yes, what was the duration of symptoms
		□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months
		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months $\square$ >10-11 months $\square$ >11 -12 months $\square$ >12 months $\square$ Not sure
Disturbed smell	□ Yes □ No	If yes, what was the time of onset
Disturbed Sittell	l res li No	$\square$ < 1 month $\square$ 1-2 months $\square$ >2 -3 months $\square$ >3-4 months $\square$ >4-5 months
		□ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months □ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge
		□ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge
		If yes, what was the duration of symptoms
		□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months
	1	- <

		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months
Loop of small	Van Na	□ >10-11 months □ >11 -12 months □ >12 months □ Not sure
Loss of smell	□ Yes □ No	If yes, what was the time of onset □ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months
		< 1 months   >2 -3 months   >3-4 months   >4-5 months   >5-6 months   >6-7 months   >7 -8 months   >8-9 months   >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge
		□ Not sure
		If yes, what was the duration of symptoms
		$\square$ < 1 month $\square$ 1-2 months $\square$ >2 -3 months $\square$ >3-4 months $\square$ >4-5 months
		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ Not sure
Disturbed taste	□ Yes □ No	If yes, what was the time of onset
		$\square$ < 1 month $\square$ 1-2 months $\square$ >2 -3 months $\square$ >3-4 months $\square$ >4-5 months
		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months
		$\square$ >10-11 months $\square$ >11 -12 months $\square$ >12 months $\square$ From the time of discharge
		□ Not sure
		If yes, what was the duration of symptoms
		□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months
		□ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months
Loss of taste	□ Yes □ No	□ >10-11 months □ >11 -12 months □ >12 months □ Not sure  If yes, what was the time of onset
LOSS OF IdSIE	□ 162 □ INO	$\square$ < 1 month $\square$ 1-2 months $\square$ >2 -3 months $\square$ >3-4 months $\square$ >4-5 months
		□ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge
		□ Not sure
		If yes, what was the duration of symptoms
		$\square$ < 1 month $\square$ 1-2 months $\square$ >2 -3 months $\square$ >3-4 months $\square$ >4-5 months
		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months
		$\square$ >10-11 months $\square$ >11 -12 months $\square$ >12 months $\square$ Not sure
Tremor/shakiness	□ Yes □ No	If yes, what was the time of onset
		$\square$ < 1 month $\square$ 1-2 months $\square$ >2 -3 months $\square$ >3-4 months $\square$ >4-5 months
		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge
		□ Not sure
		If yes, what was the duration of symptoms
		$\square$ < 1 month $\square$ 1-2 months $\square$ >2 -3 months $\square$ >3-4 months $\square$ >4-5 months
		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months $\square$ >10-11 months $\square$ >11 -12 months $\square$ >12 months $\square$ Not sure
Tingling feeling/ "pins and needles"	□ Yes □ No	If yes, what was the time of onset
ringing reening/ pins and needles	□ TES □ INO	$\square$ < 1 month $\square$ 1-2 months $\square$ >2 -3 months $\square$ >3-4 months $\square$ >4-5 months
		□ < 1 Hontin □ 1-2 Hontins □ >2 -3 Hontins □ >3-4 Hontins □ >4-5 Hontins □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge
		□ Not sure

		If yes, what was the duration of symptoms
		$\square$ < 1 month $\square$ 1-2 months $\square$ >2 -3 months $\square$ >3-4 months $\square$ >4-5 months
		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ Not sure
Seizures/fits	□ Yes □ No	If yes, what was the time of onset
		$\square$ < 1 month $\square$ 1-2 months $\square$ >2 -3 months $\square$ >3-4 months $\square$ >4-5 months
		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge
		□ Not sure
		If yes, what was the duration of symptoms
		$\square$ < 1 month $\square$ 1-2 months $\square$ >2 -3 months $\square$ >3-4 months $\square$ >4-5 months
		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ Not sure
Confusion/lack of concentration	□ Yes □ No	If yes, what was the time of onset
		$\square$ < 1 month $\square$ 1-2 months $\square$ >2 -3 months $\square$ >3-4 months $\square$ >4-5 months
		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge
		□ Not sure
		If yes, what was the duration of symptoms
		$\square$ < 1 month $\square$ 1-2 months $\square$ >2 -3 months $\square$ >3-4 months $\square$ >4-5 months
		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ Not sure
Problems speaking or communicating	□ Yes □ No	If yes, what was the time of onset
		$\square$ < 1 month $\square$ 1-2 months $\square$ >2 -3 months $\square$ >3-4 months $\square$ >4-5 months
		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge
		□ Not sure
		If yes, what was the duration of symptoms
		$\square$ < 1 month $\square$ 1-2 months $\square$ >2 -3 months $\square$ >3-4 months $\square$ >4-5 months
		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ Not sure
Insomnia (hard to fall asleep, hard to stay asleep)	□ Yes □ No	If yes, what was the time of onset
		$\square$ < 1 month $\square$ 1-2 months $\square$ >2 -3 months $\square$ >3-4 months $\square$ >4-5 months
		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge
		□ Not sure
		If yes, what was the duration of symptoms
		$\square$ < 1 month $\square$ 1-2 months $\square$ >2 -3 months $\square$ >3-4 months $\square$ >4-5 months
		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months
		$\square$ >10-11 months $\square$ >11 -12 months $\square$ >12 months $\square$ Not sure
Hypersomnia (excessive daytime sleepiness or	□ Yes □ No	If yes, what was the time of onset
prolonged nighttime sleep)		$\square$ < 1 month $\square$ 1-2 months $\square$ >2 -3 months $\square$ >3-4 months $\square$ >4-5 months
		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months

		□ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge □ Not sure
		If yes, what was the duration of symptoms
		$\bigcirc$ < 1 month $\bigcirc$ 1-2 months $\bigcirc$ >2 -3 months $\bigcirc$ >3-4 months $\bigcirc$ >4-5 months
		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months
		$\square > 10-11 \text{ months } \square > 11-12 \text{ months } \square > 12 \text{ months } \square \text{ Not sure}$
Fatigue	□ Yes □ No	If yes, what was the time of onset
ŭ		$\square$ < 1 month $\square$ 1-2 months $\square$ >2 -3 months $\square$ >3-4 months $\square$ >4-5 months
		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge
		□ Not sure
		If yes, what was the duration of symptoms
		$\square$ < 1 month $\square$ 1-2 months $\square$ >2 -3 months $\square$ >3-4 months $\square$ >4-5 months
		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ Not sure
Gastrointestinal problems	Tick Yes or No	If yes, what was the time of onset
Weight loss	□ Yes □ No	$\square$ < 1 month $\square$ 1-2 months $\square$ >2 -3 months $\square$ >3-4 months $\square$ >4-5 months
		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge
		□ Not sure
		If yes, what was the duration of symptoms
		$\square$ < 1 month $\square$ 1-2 months $\square$ >2 -3 months $\square$ >3-4 months $\square$ >4-5 months
		□ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months
Duck laws a small assiss as a harrier	Van Na	□ >10-11 months □ >11 -12 months □ >12 months □ Not sure
Problems swallowing or chewing	□ Yes □ No	If yes, what was the time of onset  □ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months
		□ < 1 months □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-3 months □ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge
		Not sure
		If yes, what was the duration of symptoms
		$\square$ < 1 month $\square$ 1-2 months $\square$ >2 -3 months $\square$ >3-4 months $\square$ >4-5 months
		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ Not sure
Poor appetite	□ Yes □ No	If yes, what was the time of onset
		$\square$ < 1 month $\square$ 1-2 months $\square$ >2 -3 months $\square$ >3-4 months $\square$ >4-5 months
		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge
		□ Not sure
		If yes, what was the duration of symptoms
		$\square$ < 1 month $\square$ 1-2 months $\square$ >2 -3 months $\square$ >3-4 months $\square$ >4-5 months
		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ Not sure

Diarrhea	□ Yes □ No	If yes, what was the time of onset
		$\square$ < 1 month $\square$ 1-2 months $\square$ >2 -3 months $\square$ >3-4 months $\square$ >4-5 months
		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge
		□ Not sure
		If yes, what was the duration of symptoms
		$\square$ < 1 month $\square$ 1-2 months $\square$ >2 -3 months $\square$ >3-4 months $\square$ >4-5 months
		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ Not sure
Stomach/ abdominal pain	□ Yes □ No	If yes, what was the time of onset
		$\square$ < 1 month $\square$ 1-2 months $\square$ >2 -3 months $\square$ >3-4 months $\square$ >4-5 months
		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge
		□ Not sure
		If yes, what was the duration of symptoms
		$\square$ < 1 month $\square$ 1-2 months $\square$ >2 -3 months $\square$ >3-4 months $\square$ >4-5 months
		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ Not sure
Feeling nauseous	□ Yes □ No	If yes, what was the time of onset
		$\square$ < 1 month $\square$ 1-2 months $\square$ >2 -3 months $\square$ >3-4 months $\square$ >4-5 months
		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge
		□ Not sure
		If yes, what was the duration of symptoms
		□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months
		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ Not sure
Vomiting	□ Yes □ No	If yes, what was the time of onset
		□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months
		□ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge
		□ Not sure
		If yes, what was the duration of symptoms
		□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months
		□ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months
Constinction	□ Yes □ No	□ >10-11 months □ >11 -12 months □ >12 months □ Not sure  If yes, what was the time of onset
Constipation	☐ 1 €5 ☐ INU	□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months
		□ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge
		Not sure
		If yes, what was the duration of symptoms
		□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months
	1	

		□ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months □ >10-11 months □ >11 -12 months □ >12 months □ Not sure
Cardiovascular problems	Tick Yes or No	If yes, what was the time of onset
Palpitations (heart racing)	□ Yes □ No	
		If yes, what was the duration of symptoms
		□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months     □ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months     □ >10-11 months □ >11 -12 months □ >12 months □ Not sure
Variations in heart rate (tachycardia or	□ Yes □ No	If yes, what was the time of onset
bradycardia)		<pre>- &lt; 1 month - 1-2 months - &gt;2 -3 months - &gt;3-4 months - &gt;4-5 months - &gt;5-6 months - &gt;6-7 months - &gt;7 -8 months - &gt;8-9 months - &gt;9 -10 months - &gt;10-11 months - &gt;11 -12 months - &gt;12 months - From the time of discharge - Not sure</pre>
		If yes, what was the duration of symptoms
		□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months □ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months □ >10-11 months □ >11 -12 months □ >12 months □ Not sure
Bleeding	□ Yes □ No	If yes, what was the time of onset
		<pre>- &lt; 1 month - 1-2 months - &gt;2 -3 months - &gt;3-4 months - &gt;4-5 months - &gt;5-6 months - &gt;6-7 months - &gt;7 -8 months - &gt;8-9 months - &gt;9 -10 months - &gt;10-11 months - &gt;11 -12 months - &gt;12 months - From the time of discharge - Not sure</pre>
		If yes, what was the duration of symptoms
		□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months □ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months □ >10-11 months □ >11 -12 months □ >12 months □ Not sure
If yes, specify bleeding site:		
Genitourinary problems	Tick Yes or No	If yes, what was the time of onset
Urination problems	□ Yes □ No	□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months     □ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months     □ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge     □ Not sure
		If yes, what was the duration of symptoms
		□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months □ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months □ >10-11 months □ >11 -12 months □ >12 months □ Not sure
Changes in menstruation, (if regular before Covid-	□ Yes □ No	If yes, what was the time of onset
19 illness)	□ Not applicable	$\square$ < 1 month $\square$ 1-2 months $\square$ >2 -3 months $\square$ >3-4 months $\square$ >4-5 months

		□ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months □ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge □ Not sure
		If yes, what was the duration of symptoms
		- < 1 month = 1-2 months = >2 -3 months = >3-4 months = >4-5 months
		□ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ Not sure
Other problems	Tick Yes or No	If yes, what was the time of onset
Bilateral conjunctivitis	□ Yes □ No	$\square$ < 1 month $\square$ 1-2 months $\square$ >2 -3 months $\square$ >3-4 months $\square$ >4-5 months
If yes, □ purulent □ non-purulent		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge
		□ Not sure
		If yes, what was the duration of symptoms
		$\square$ < 1 month $\square$ 1-2 months $\square$ >2 -3 months $\square$ >3-4 months $\square$ >4-5 months
		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ Not sure
Lumps or rashes (purple/pink) on toes	□ Yes □ No	If yes, what was the time of onset
		□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months
		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge
		□ Not sure
		If yes, what was the duration of symptoms  □ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months
		□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months □ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months
		□ >5-6 Months □ >6-7 Months □ >7 -6 Months □ >6-9 Months □ >9 -10 Months □ >10-11 months □ >11 -12 months □ >12 months □ Not sure
Skin rash	□ Yes □ No	If yes, what was the time of onset
Skiii iasii	□ 162 □ 140	
		>5-6 months   >6-7 months   >7 -8 months   >8-9 months   >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge
		Not sure
		If yes, what was the duration of symptoms
		< 1  month   1-2  months   > 2-3  months   > 3-4  months   > 4-5  months
		$\square$ >5-6 months $\square$ >6-7 months $\square$ >7 -8 months $\square$ >8-9 months $\square$ >9 -10 months
		□ >10-11 months □ >11 -12 months □ >12 months □ Not sure
Skin rash If yes, tick all body areas that apply:	□ Yes □ No	□ Face
		□ Trunk (stomach or back)
		□ Arms
		□ Legs
		□ Buttocks
		□ Toes
		□ Fingers
		□ Accompanied by itch
Hair loss	□ Yes □ No	If yes, what was the time of onset

		<pre></pre>
		If yes, what was the duration of symptoms
		□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months     □ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months     □ >10-11 months □ >11 -12 months □ >12 months □ Not sure
Hyperhidrosis	□ Yes □ No	If yes, what was the time of onset
		□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months     □ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months     □ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge     □ Not sure
		If yes, what was the duration of symptoms
		□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months     □ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months     □ >10-11 months □ >11 -12 months □ >12 months □ Not sure
Other New Symptoms, if yes, specify all w duration:	th their onset and	If yes, what was the time of onset
		□ < 1 month □ 1-2 months □ >2 -3 months □ >3-4 months □ >4-5 months □ >5-6 months □ >6-7 months □ >7 -8 months □ >8-9 months □ >9 -10 months □ >10-11 months □ >11 -12 months □ >12 months □ From the time of discharge □ Not sure
		If yes, what was the duration of symptoms

7. Your child's overall health status		
We would like to know how good or bad your child's health was BEFORE Covid-19 and how it is TODAY	Best	Best
BEFORE COVID-19 and now it is TODAY	health	health
This scale is numbered from 0 to 100%	100	100
with 100% meaning the best health you can imagine  0% means the worst health you can imagine.	95	95
	90	90
Please indicate on the scale and write the number in the box below each scale to indicate how good or bad your child's health was BEFORE Covid-19	85	85
and how it is <b>TODAY</b> .	80	80
	75	75
	70	70
	65	65
	60	60
	55	55
	50	50
	45	45
	40	40
	35	35
	30	30
	25	25
	20	20
	15	15
	10	10
	5	5
	0 Before	Today
	Covid-19	

8. Vaccinations	
Has your child been vaccinated in accordance with the national vaccination schedule	?
□ Yes, vaccinated up to date □ Yes, but some vaccines were missed □ No, I avoid vaccination	on for my child
Please provide an approximate date of your child's latest vaccination? [_D_][_D_]/[_M_][_M_]/[_2_][_V_]	
Please, specify what was the vaccine: I do not remember	
I trust information I receive about vaccines?  □ Not at all □ Only a little □ Undecided □ Quite a lot □ A great deal	
How confident are you in any of the childhood vaccines safety?	
□ Not at all □ Only a little □ Undecided □ Quite a lot □ A great deal	
Has your child been vaccinated against Covid-19? ☐ Yes ☐ No ☐ Not sure	
If yes, how many times have they had the Covid-19 vaccine? [_Number_]	
Estimated date of the last vaccine dose received: [_D_][_D_]/[_M_][_M_]/[_2_][_0_][_2_][_Y	_]
Which type of Covid-19 vaccine did they receive: □AstraZeneca □Pfizer-BioNTech □Imperial □Janssens □Moderna's □Sinopharm □Sputnik V □Other (name): □No	t sure
If no, would you like to vaccinate your child against Covid-19 in the future?   Yes   No	o □ Not sure
I trust information I receive about Covid-19 vaccination?  □ Not at all □ Only a little □ Undecided □ Quite a lot □ A great deal	
How confident are you in the safety of Covid-19 vaccinations?  Not at all Only a little Undecided Quite a lot A great deal  What is your opinion of Russian-made vaccines against Covid-19?  Negative Neutral Positive Not sure  What is your opinion of vaccines against Covid-19 produced abroad?  Negative Neutral Positive Not sure	
9. Some questions about you	
During your child's illness, have you often been in a bad mood, depressed or feeling hopeless?	□ Yes □ No
During your child's illness, did you often feel that everything was difficult, and you did not want to do anything?	□ Yes □ No
During your child's illness, did you often feel persistent fatigue for no reason?	□ Yes □ No
Did your child's illness often make you feel nervous, anxious or extremely stressed?	□ Yes □ No
Did your child's illness often leave you unable to calm down or have you often been unable to calm or control your worries?	□ Yes □ No
Due to your child's illness, have you often experienced fear, as if something terrible were about to happen?	□ Yes □ No
Due to your child's illness, have you had to face aggressive or prejudiced attitudes from others?	□ Yes □ No
Did you receive enough help and support during your child's illness?	□ Yes □ No

10. Please let us know of any further comments about the child's illness, the pandemic, lockdown and/or any sequelae.
11. End of survey
Thank you for your time!

**Table S1.** Categorisation of persistent symptoms at follow-up.

Symptom category	Persistent symptoms included
Musculoskeletal	joint pain or swelling OR persistent muscle pain
Cardiovascular	variations in heart rate OR palpitations
Respiratory	difficulty breathing/chest tightness OR pain on breathing OR persistent cough
Neurological	cannot fully move or control movement OR problems with balance OR confusion/lack of concentration OR problems speaking or communicating OR seizures/fits OR tingling feeling/ 'pins and needles' OR tremor/shakiness OR dizziness/light headedness OR fainting/ blackouts
Dermatological	skin rash OR lumps or rashes (purple/pink) on toes OR hair loss
Gastrointestinal	constipation OR diarrhea OR feeling nauseous OR stomach/ abdominal pain OR vomiting
Sensory	disturbed smell OR disturbed taste OR loss of smell OR loss of taste
Sleep	hypersomnia OR insomnia
Fatigue	fatigue

 $\textbf{Table S2}. \ \textbf{Symptoms at the time of hospital admission.}$ 

Characteristics	Results
History of fever	427/511 (83.6%)
Cough	284/510 (55.7%)
Fatigue	197/506 (38.9%)
Rhinorrhoea	278/512 (54.3%)
Shortness of breath	77/513 (15%)
Disturbed smell or loss of smell	64/456 (14%)
Sore throat	67/487 (13.8%)
Lymphadenopathy	52/512 (10.2%)
Headache	40/465 (8.6%)
Diarrhoea	43/511 (8.4%)
Skin rash	41/512 (8%)
Wheezing	39/512 (7.6%)
Vomiting / Nausea	32/512 (6.2%)
Chest pain	28/464 (6%)
Abdominal pain	27/489 (5.5%)
Disturbed taste or Loss of taste	16/456 (3.5%)
Muscle aches	14/463 (3%)
Conjunctivitis	10/512 (2%)
Joint pain	5/461 (1.1%)
Ear pain	3/463 (0.6%)
Seizures	3/512 (0.6%)
Bleeding	3/512 (0.6%)
Lower chest wall indrawing	3/512 (0.6%)
Confusion	2/511 (0.4%)

 $\textbf{Table S3}. \ \textbf{Most commonly used treatments during the hospital stay}.$ 

Characteristics	Total
Antiviral or COVID-19 targeted agent	394/512 (77.0%)
Antibiotics	380/513 (74.1%)
Mucolytics	188/513 (36.7%)
Arbidol	133/512 (26%)
Antifungal agent	25/513 (4.9%)
Corticosteroid	20/513 (3.9%)
Heparin	17/513 (3.3%)

**Table S4.** Symptoms reported at the time of the follow-up interview and symptom duration (in months).

Current symptom	Total number of patients with the symptom	Total number of patients with the persistent symptom	< 1	1-2	> 2-3	> 3-4	> 4-5	> 5-6	> 6-7	> 7-8	> 8-9	> 9-10	From the time of discharge
Fatigue	63/498 (12.65%)	53/496 (10.69%)	5/496 (1.01%)	1/496 (0.2%)	0/496 (0%)	1/496 (0.2%)	1/496 (0.2%)	4/496 (0.81%)	1/496 (0.2%)	2/496 (0.4%)	1/496 (0.2%)	0/496 (0%)	45/496 (9.07%)
Nasal congestion/ rhinorrhea	43/505(8.51%)	10/505 (1.98%)	29/505 (5.74 %)	2/505 (0.4%)	1/505 (0.2 %)	1/505 (0.2%)	0/505 (0%)	o/505 (o%)	0/505 (0%)	o/505 (0%)	0/505 (0%)	o/505 (o%)	10/505 (1.98 %)
Insomnia	32/501 (6.39%)	26/501 (5.19%)	2/501 (0.4%)	2/501 (0.4%)	1/501 (0.2%)	0/501 (0%)	1/501 (0.2%)	2/501 (0.4%)	1/501 (0.2%)	1/501 (0.2%)	0/501 (0%)	0/501 (0%)	22/501 (4.39%)
Disturbed smell	26/468 (5.56%)	22/467 (4.71%)	0/467 (0%)	2/467 (0.43%)	1/467 (0.21%)	0/467 (0%)	0/467 (0%)	3/467 (0.64%)	0/467 (0%)	2/467 (0.43%)	0/467 (0%)	0/467 (0%)	17/467 (3.64%)
Headache	24/488(4.92%)	17/486 (3.5%)	4/486 (0.82%)	0/486 (0%)	1/486 (0.21%)	0/486 (0%)	0/486 (0%)	1/486 (0.21%)	0/486 (0%)	0/486 (0%)	0/486 (0%)	0/486 (0%)	16/486 (3.29%)
Disturbed taste	18/468 (3.85%)	16/468 (3.42%)	0/468	1/468 (0.21%)	1/468 (0.21%)	0/468 (0%)	0/468 (0%)	2/468 (0.43%)	0/468 (0%)	2/468 (0.43%)	0/468 (0%)	0/468 (0%)	12/468 (2.56%)
Hyperhidrosis	17/502(3.39%)	13/502 (2.59%)	1/502 (0.2%)	2/502 (0.4%)	0/502	1/502 (0.2%)	0/502	0/502	0/502	1/502 (0.2%)	0/502 (0%)	0/502 (0%)	12/502 (2.39%)
Persistent cough	17/503 (3.38%)	5/503 (0.99%)	9/503 (1.79%)	3/503 (0.6%)	0/503 (0%)	0/503 (0%)	0/503	0/503 (0%)	0/503 (0%)	0/503	0/503	0/503	5/503 (0.99%)
Hypersomnia	16/501 (3.19%)	15/501 (2.99%)	0/501 (0%)	0/501 (0%)	0/501 (0%)	1/501 (0.2%)	0/501 (0%)	1/501 (0.2%)	1/501 (0.2%)	1/501 (0.2%)	1/501 (0.2%)	0/501 (0%)	11/501 (2.2%)
Poor appetite	15/500 (3%)	12/500 (2.4%)	2/500 (0.4%)	0/500 (0%)	1/500 (0.2%)	0/500 (0%)	0/500	1/500 (0.2%)	0/500	1/500 (0.2%)	1/500 (0.2%)	0/500	9/500 (1.8%)
Skin rash	13/497 (2.62%)	8/497 (1.61%)	3/497 (0.6%)	0/497 (0%)	1/497 (0.2%)	0/497 (0%)	1/497 (0.2%)	2/497 (0.4%)	0/497 (0%)	0/497 (0%)	0/497 (0%)	0/497 (0%)	6/497 (1.21%)
Diarrhea	13/499 (2.61%)	10/499 (2%)	1/499 (0.2%)	0/499	1/499 (0.2%)	0/499	1/499 (0.2%)	0/499	0/499	1/499 (0.2%)	0/499	0/499	9/499 (1.8%)
Stomach/ abdominal pain	13/499 (2.61%)	10/499 (2%)	1/499 (0.2%)	1/499 (0.2%)	1/499 (0.2%)	0/499 (0%)	0/499 (0%)	0/499	0/499 (0%)	1/499 (0.2%)	0/499	0/499 (0%)	9/499 (1.8%)
Problems seeing/ blurred vision	12/480 (2.5%)	10/479 (2.09%)	0/479 (0%)	0/479 (0%)	1/479 (0.21%)	0/479 (0%)	0/479 (0%)	1/479 (0.21%)	1/479 (0.21%)	0/479 (0%)	0/479 (0%)	0/479 (0%)	8/479 (1.67%)
Hair loss	12/501 (2.4%)	9/501 (1.8%)	0/501 (0%)	1/501 (0.2%)	2/501 (0.4%)	0/501 (0%)	0/501 (0%)	1/501 (0.2%)	1/501 (0.2%)	1/501 (0.2%)	0/501 (0%)	0/501 (0%)	6/501 (1.2%)
Dizziness/ light headedness	10/486 (2.06%)	5/484 (1.03%)	2/484 (0.41%)	1/484 (0.21%)	0/484 (0%)	0/484 (0%)	0/484 (0%)	0/484 (0%)	0/484 (0%)	0/484 (0%)	0/484 (0%)	0/484 (0%)	5/484 (1.03%)
Joint pain or swelling	10/493 (2.03%)	6/492 (1.22%)	1/492 (0.2%)	2/492 (0.41%)	0/492 (0%)	0/492 (0%)	0/492 (0%)	0/492 (0%)	0/492 (0%)	1/492 (0.2%)	0/492 (0%)	0/492 (0%)	5/492 (1.02%)
Variations in heart rate	10/494 (2.02%)	6/493 (1.22%)	0/493 (0%)	0/493	1/493 (0.2%)	0/493 (0%)	0/493	0/493 (0%)	0/493 (0%)	1/493 (0.2%)	0/493	0/493	5/493 (1.01%)
Constipation	9/500 (1.8%)	8/500 (1.6%)	0/500	0/500	0/500	1/500 (0.2%)	0/500	0/500 (0%)	0/500 (0%)	0/500 (0%)	0/500 (0%)	0/500	8/500 (1.6%)
Loss of smell	8/468 (1.71%)	7/468 (1.5%)	0/468 (0%)	1/468 (0.21%)	0/468 (0%)	0/468 (0%)	0/468	0/468 (0%)	0/468 (0%)	0/468	0/468	0/468 (0%)	7/468 (1.5%)
Difficulty breathing /chest	8/503 (1.59%)	7/503 (1.39%)	1/503 (0.2 %)	0/503 (0%)	0/503 (0%)	0/503 (0%)	0/503 (0%)	1/503 (0.2 %)	0/503 (0%)	0/503 (0%)	0/503 (0%)	0/503 (0%)	6/503 (1.19 %)

tightness			-	5	5	=	<u>-</u>	•	-	-	-	-	-
Palpitations	7/472(1.48%)	5/471 (1.06%)	0/471 (0%)	0/471 (0%)	1/471 (0.21%)	0/471 (0%)	0/471 (0%)	0/471 (0%)	0/471 (0%)	1/471 (0.21%)	0/471 (0%)	0/471 (0%)	4/471 (0.85%)
Feeling nauseous	7/500 (1.4%)	6/500 (1.2%)	1/500 (0.2%)	0/500 (0%)	0/500 (0%)	0/500 (0%)	0/500 (0%)	0/500 (0%)	1/500 (0.2%)	1/500 (0.2%)	0/500 (0%)	0/500 (0%)	4/500 (0.8%)
Chest pain	6/487(1.23%)	3/487 (0.62%)	2/487 (0.41 %)	o/487 (0%)	1/487 (0.21 %)	0/487 (0%)	0/487 (0%)	o/487 (0%)	0/487 (0%)	o/487 (0%)	o/487 (0%)	0/487 (0%)	3/487 (0.62 %)
Persistent muscle pain	6/491(1.22%)	4/490 (0.82%)	1/490 (0.2%)	0/490 (0%)	0/490 (0%)	0/490 (0%)	0/490 (0%)	0/490 (0%)	0/490 (0%)	1/490 (0.2%)	0/490 (0%)	0/490 (0%)	3/490 (0.61%)
Problems with balance	6/496(1.21%)	2/494 (0.4%)	1/494 (0.2%)	1/494 (0.2%)	0/494 (0%)	0/494 (0%)	0/494 (0%)	0/494 (0%)	0/494 (0%)	0/494 (0%)	0/494 (0%)	0/494 (0%)	2/494 (0.4%)
Urination problems	4/496 (0.81%)	3/496 (0.6%)	1/496 (0.2%)	0/496 (0%)	0/496 (0%)	0/496 (0%)	0/496 (0%)	0/496 (0%)	0/496 (0%)	0/496 (0%)	0/496 (0%)	1/496 (0.2%)	2/496 (0.4%)
Vomiting	4/500 (0.8%)	4/500 (0.8%)	0/500 (0%)	0/500 (0%)	0/500 (0%)	0/500 (0%)	0/500 (0%)	0/500 (0%)	0/500 (0%)	0/500 (0%)	1/500 (0.2%)	0/500 (0%)	3/500 (0.6%)
Confusion/ lack of concentration	3/486 (0.62%)	2/486 (0.41%)	0/486 (0%)	0/486 (0%)	0/486 (0%)	0/486 (0%)	1/486 (0.21%)	1/486 (0.21%)	0/486 (0%)	0/486 (0%)	0/486 (0%)	0/486 (0%)	1/486 (0.21%)
Pain on breathing	3/488(0.61%)	2/488 (0.41%)	0/488 (0%)	0/488 (0%)	1/488 (0.2 %)	0/488 (0%)	0/488 (0%)	0/488 (0%)	0/488 (0%)	0/488 (0%)	0/488 (0%)	0/488 (0%)	2/488 (0.41%)
Cannot fully move or control movement	3/499(0.6%)	2/499 (0.4%)	0/499 (0%)	1/499 (0.2%)	0/499 (0%)	0/499 (0%)	0/499 (0%)	0/499 (0%)	0/499 (0%)	0/499 (0%)	0/499 (0%)	0/499 (0%)	2/499 (0.4%)
Tremor/ shakiness	3/500 (0.6%)	3/500 (0.6%)	o/500 (0%)	0/500 (0%)	0/500 (0%)	0/500 (0%)	0/500 (0%)	0/500 (0%)	0/500 (0%)	0/500 (0%)	0/500 (0%)	0/500 (0%)	3/500 (0.6%)
Bleeding	3/497 (0.6%)	1/497 (0.2%)	0/497 (0%)	1/497 (0.2%)	1/497 (0.2%)	0/497 (0%)	0/497 (0%)	0/497 (0%)	0/497 (0%)	0/497 (0%)	0/497 (0%)	0/497 (0%)	1/497 (0.2%)
Changes in menstruation	3/501 (0.6%)	3/501 (0.6%)	0/501 (0%)	0/501 (0%)	0/501 (0%)	0/501 (0%)	0/501 (0%)	0/501 (0%)	1/501 (0.2%)	0/501 (0%)	0/501 (0%)	0/501 (0%)	2/501 (0.4%)
Loss of taste	2/469(0.43%)	2/469 (0.43%)	0/469 (0%)	0/469 (0%)	0/469 (0%)	0/469 (0%)	0/469 (0%)	0/469 (0%)	0/469 (0%)	0/469 (0%)	0/469 (0%)	0/469 (0%)	2/469 (0.43%)
Tingling feeling/ "pins and needles"	2/472 (0.42%)	2/472 (0.42%)	0/472 (0%)	1/472 (0.21%)	0/472 (0%)	0/472 (0%)	0/472 (0%)	0/472 (0%)	1/472 (0.21%)	0/472 (0%)	0/472 (0%)	0/472 (0%)	0/472 (0%)
Weight loss	2/500 (0.4%)	0/500 (0%)	0/500 (0%)	0/500 (0%)	0/500 (0%)	0/500 (0%)	1/500 (0.2%)	0/500 (0%)	0/500 (0%)	0/500 (0%)	0/500 (0%)	0/500 (0%)	0/500 (0%)
Problems swallowing or chewing	2/499 (0.4%)	1/499 (0.2%)	1/499 (0.2%)	0/499 (0%)	0/499 (0%)	0/499 (0%)	0/499 (0%)	0/499 (0%)	0/499 (0%)	0/499 (0%)	0/499 (0%)	0/499 (0%)	1/499 (0.2%)
Bilateral conjunctivitis	2/496 (0.4%)	2/496 (0.4%)	0/496 (0%)	0/496 (0%)	0/496 (0%)	0/496 (0%)	0/496 (0%)	0/496 (0%)	0/496 (0%)	0/496 (0%)	0/496 (0%)	0/496 (0%)	2/496 (0.4%)
Seizures/fits	1/498 (0.2%)	0/498 (0%)	0/498 (NaN%)	0/498 (NaN%)	0/498 (NaN%)	0/498 (NaN%)	0/498 (NaN%)	0/498 (NaN%)	0/498 (NaN%)	0/498 (NaN%)	0/498 (NaN%)	0/498 (NaN%)	o/498 (NaN%)
Lumps or rashes (purple/pink) on toes	1/495 (0.2%)	1/495 (0.2%)	0/495 (0%)	0/495 (0%)	0/495 (0%)	0/495 (0%)	0/495 (0%)	0/495 (0%)	0/495 (0%)	0/495 (0%)	0/495 (0%)	0/495 (0%)	1/495 (0.2%)

Problems	1/489 (0.2%)	1/489 (0.2%)	0/489	0/489	0/489	0/489	0/489	0/489	0/489	0/489	0/489	0/489	1/489 (0.2%)
speaking or			(o%)	(0%)									
communicating													
Fainting/	0/497 (0%)	0/497 (0%)	0/497	0/497	0/497	0/497	0/497	0/497	0/497	0/497	0/497	0/497	o/497 (NaN%)
blackouts			(NaN%)										

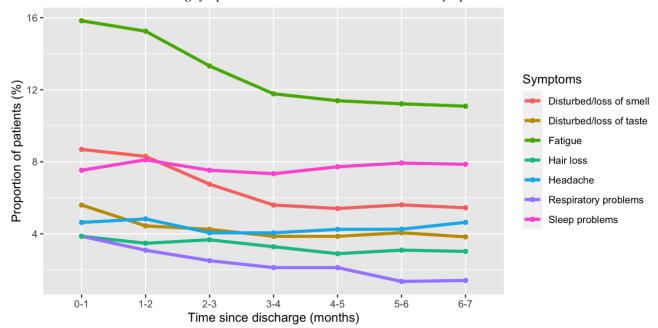
**Table S4**. Parental perception of mood and behaviour changes in their children.

Characteristic	Likert scale response								Reasons of changes					
	1 (less)	2	3 (the same)	4	5 (more)	Not known	Other	Illness itself	Covid-19 pandemic	Both	Unsure			
Eating	14 (2.7%)	23 (4.5%)	445 (86.4%)	9 (1.7%)	10 (1.9%)	3 (0.6%)	11 (2.1%)	28 (49.1%)	4 (7%)	2 (3.5%)	23 (40.4%)			
Sleeping	15 (2.9%)	23 (4.5%)	447 (86.8%)	5 (1%)	11 (2.1%)	4 (0.8%)	10 (1.9%)	28 (52.8%)	7 (13.2%)	4 (7.5%)	14 (26.4%)			
Physical activity	27 (5.2%)	33 (6.4%)	429 (83.3%)	9 (1.7%)	4 (0.8%)	3 (0.6%)	10 (1.9%)	26 (37.7%)	22 (31.9%)	5 (7.2%)	16 (23.2%)			
Fatigue	3 (0.6%)	11 (2.1%)	400 (77.8%)	39 (7.6%)	48 (9.3%)	4 (0.8%)	9 (1.8%)	53 (53%)	11 (11%)	16 (16%)	20 (20%)			
Spending time with friends in- person	31 (6.2%)	27 (5.4%)	392 (78.1%)	19 (3.8%)	6 (1.2%)	17 (3.4%)	10 (2%)	4 (4.8%)	66 (78.6%)	7 (8.3%)	7 (8.3%)			
Spending time with friends remotely	1 (0.2%)	5 (1%)	397 (80.4%)	27 (5.5%)	37 (7.5%)	24 (4.9%)	3 (0.6%)	2 (2.8%)	58 (81.7%)	7 (9.9%)	4 (5.6%)			
Spending time watching TV, playing video/computer games, or using social media for educational purposes, including school/nursery work	2 (0.4%)	2 (0.4%)	360 (71.9%)	42 (8.4%)	68 (13.6%)	23 (4.6%)	4 (0.8%)	2 (1.8%)	105 (92.9%)	2 (1.8%)	4 (3.5%)			
Spending time watching TV, playing video/computer games, or using social media for non-educational purposes	4 (0.8%)	9 (1.8%)	408 (81.8%)	20 (4%)	28 (5.6%)	24 (4.8%)	6 (1.2%)	2 (3.4%)	44 (75.9%)	2 (3.4%)	10 (17.2%)			
Spending time outside	36 (7.1%)	39 (7.7%)	364 (71.5%)	35 (6.9%)	18 (3.5%)	6 (1.2%)	11 (2.2%)	5 (4.1%)	89 (73%)	11 (9%)	17 (13.9%)			
Attending school/nursery	29 (5.7%)	7 (1.4%)	313 (61.9%)	4 (0.8%)	36 (7.1%)	102 (20.2%)	15 (3%)	3 (3.7%)	65 (79.3%)	2 (2.4%)	12 (14.6%)			
Connectedness	4 (0.8%)	20 (4%)	456 (91%)	4 (0.8%)	1 (0.2%)	13 (2.6%)	3 (0.6%)	3 (10.7%)	14 (50%)	5 (17.9%)	6 (21.4%)			
Emotions	11 (2.2%)	57 (11.2%)	411 (80.4%)	11 (2.2%)	3 (0.6%)	5 (1%)	13 (2.5%)	24 (29.6%)	16 (19.8%)	10 (12.3%)	31 (38.3%)			
Behaviour	5 (1%)	37 (7.2%)	438 (85.5%)	8 (1.6%)	3 (0.6%)	5 (1%)	16 (3.1%)	16 (28.1%)	7 (12.3%)	6 (10.5%)	28 (49.1%)			
Relationships	1 (0.2%)	14 (2.8%)	481 (95.2%)	1 (0.2%)	0 (0%)	5 (1%)	3 (0.6%)	7 (46.7%)	2 (13.3%)	3 (20%)	3 (20%)			

**Table S5.** Parental-reported mood and behaviour changes due to Covid-19 and pandemic in their children, stratified by the the effect.

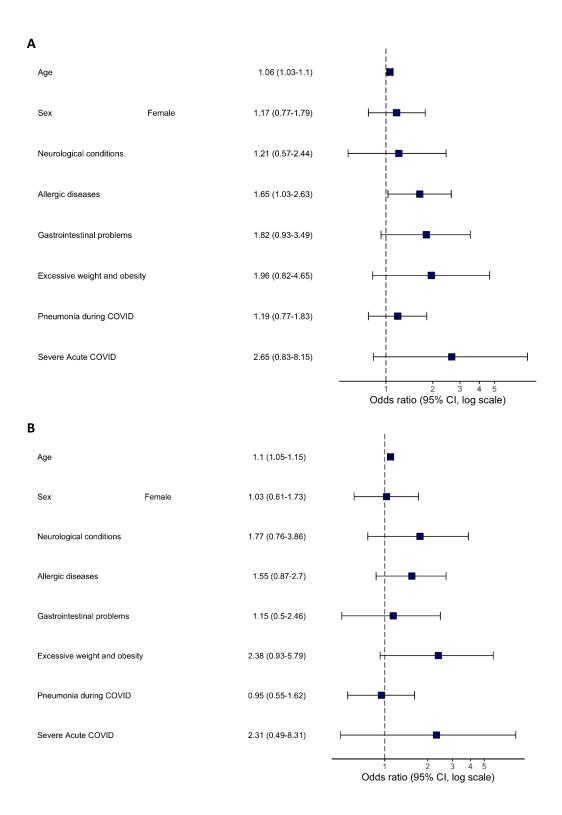
Characteristic	Caused by	illness itself	Caused by Covid-19 pandem				
	Less	More	Less	More			
Eating	23/512	4/512	0	4/512			
	(4.5%)	(0.8%)	(0%)	(0.8%)			
Sleeping	18/511	10/511	6/511	1/511			
	(3.5%)	(2%)	(1.2%)	(0.2%)			
Physical activity	24/512	2/512	19/512	3/512			
	(4.7%)	(0.4%)	(3.7%)	(0.6%)			
Fatigue	7/510	46/510	1/510	10/510			
	(1.4%)	(9%)	(0.2%)	(2%)			
Spending time with friends in-person	2/485	2/485	47/485	19/485			
	(0.4%)	(0.4%)	(9.7%)	(3.9%)			
Spending time with friends remotely	2/470	0	2/470	55/470			
	(0.4%)	(0%)	(0.4%)	(11.7%)			
Spending time watching TV, playing video/computer games, or using social media for educational purposes, including school/nursery work	1/478	1/478	o	105/478			
	(0.2%)	(0.2%)	(o%)	(22%)			
Spending time watching TV, playing video/computer games, or using social media for non-educational purposes	1/475	1/475	3/475	41/475			
	(0.2%)	(0.2%)	(0.6%)	(8.6%)			
Spending time outside	5/503	0	49/503	39/503			
	(1%)	(0%)	(9.7%)	(7.8%)			
Attending school/nursery	2/404	1/404	29/404	36/404			
	(0.5%)	(0.3%)	(7.2%)	(8.9%)			
Connectedness	2/488	1/488	13/488	1/488			
	(0.4%)	(0.2%)	(2.7%)	(0.2%)			
Emotions	22/511	2/511	13/511	2/511			
	(4.3%)	(0.4%)	(2.5%)	(0.4%)			
Behaviour	14/506	1/506	0	7/506			
	(2.8%)	(0.2%)	(0%)	(1.4%)			
Relationships	7/500	0	2/500	0			
	(1.4%)	(0%)	(0.4%)	(0%)			

**Figure S1**. The proportion of COVID-19 infected children who at various time points after discharge from hospital had one or more of the commonest continuing symptoms. Some children had more than one symptom.



The prevalence was calculated based on responses to the following questions: "Within the last seven days, has your child had any of these symptoms, which were NOT present prior to their Covid-19 illness? (If yes, please indicate below and the duration of the symptom/s) and "Please report any symptoms that have been bothering your child since discharge that are not present today. Please specify the time of onset and duration of these symptoms."

**Figure S2.** Multivariable logistic regression model to identify pre-existing risk factors for post-COVID condition (using age as a continuous variable). Odds ratios and 95% CIs for presence of (A) any category of persistent symptoms at the time of follow-up and (B) two or more co-existing categories of persistent symptoms at the time of the follow-up. Neurological conditions include "neurological disorders" and/or "neurodisability". Abbreviation: CI, confidence interval.



**Figure S3.** Multivariable logistic regression model to identify pre-existing risk factors for post-COVID condition (subgroup analyses in children ≥6 years of age). Odds ratios and 95% CIs for presence of (A) any category of persistent symptoms at the time of follow-up and (B) two or more co-existing categories of persistent symptoms at the time of the follow-up. Neurological conditions include "neurological disorders" and/or "neurodisability". Abbreviation: CI, confidence interval.

