THE LANCET
Child & Adolescent Health

Supplementary appendix

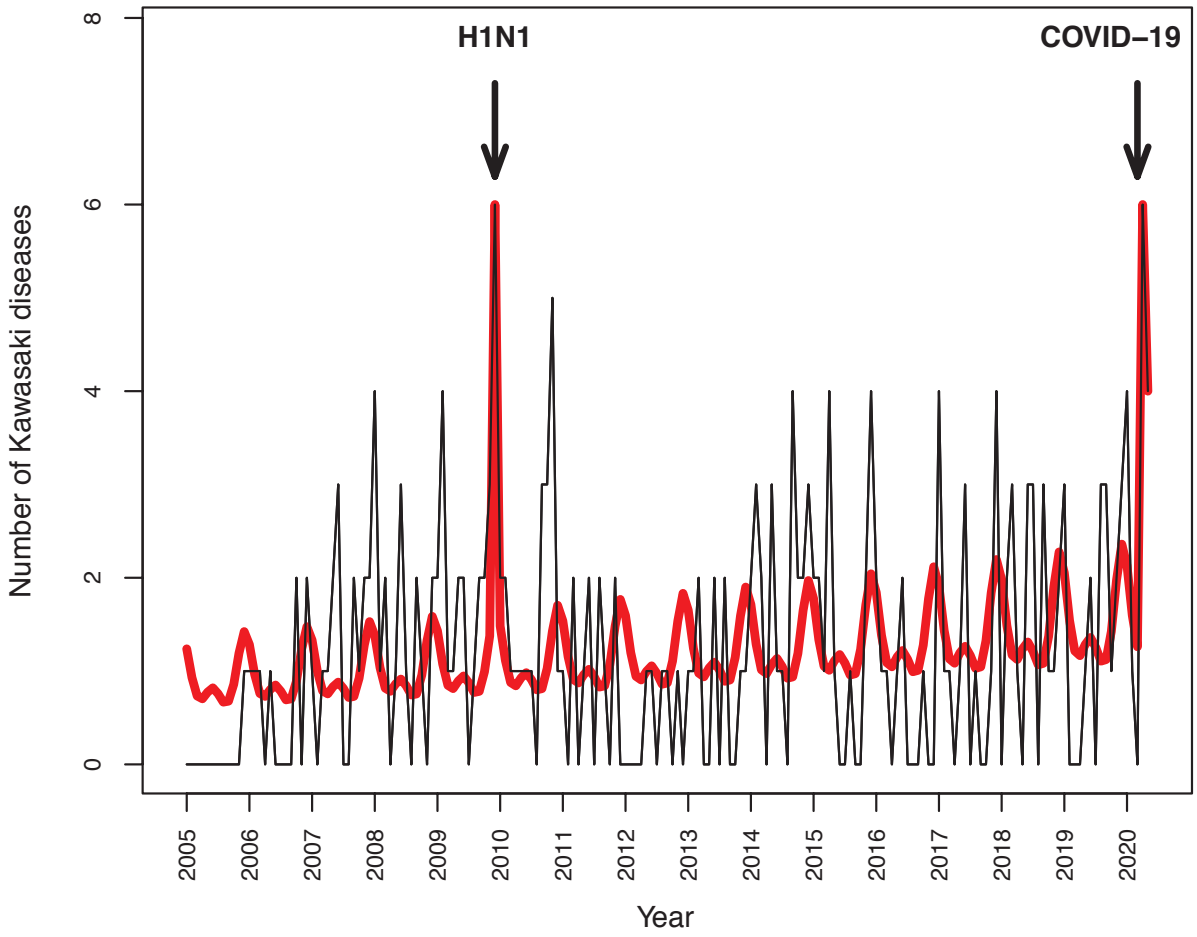
This appendix formed part of the original submission and has been peer reviewed. We post it as supplied by the authors.

Supplement to: Ouldali N, Pouletty M, Mariani P, et al. Emergence of Kawasaki disease related to SARS-CoV-2 infection in an epicentre of the French COVID-19 epidemic: a time-series analysis. *Lancet Child Adolesc Health* 2019; published online July 2. http://dx.doi.org/10.1016/S2352-4642(20)30175-9.

Supplementary data.

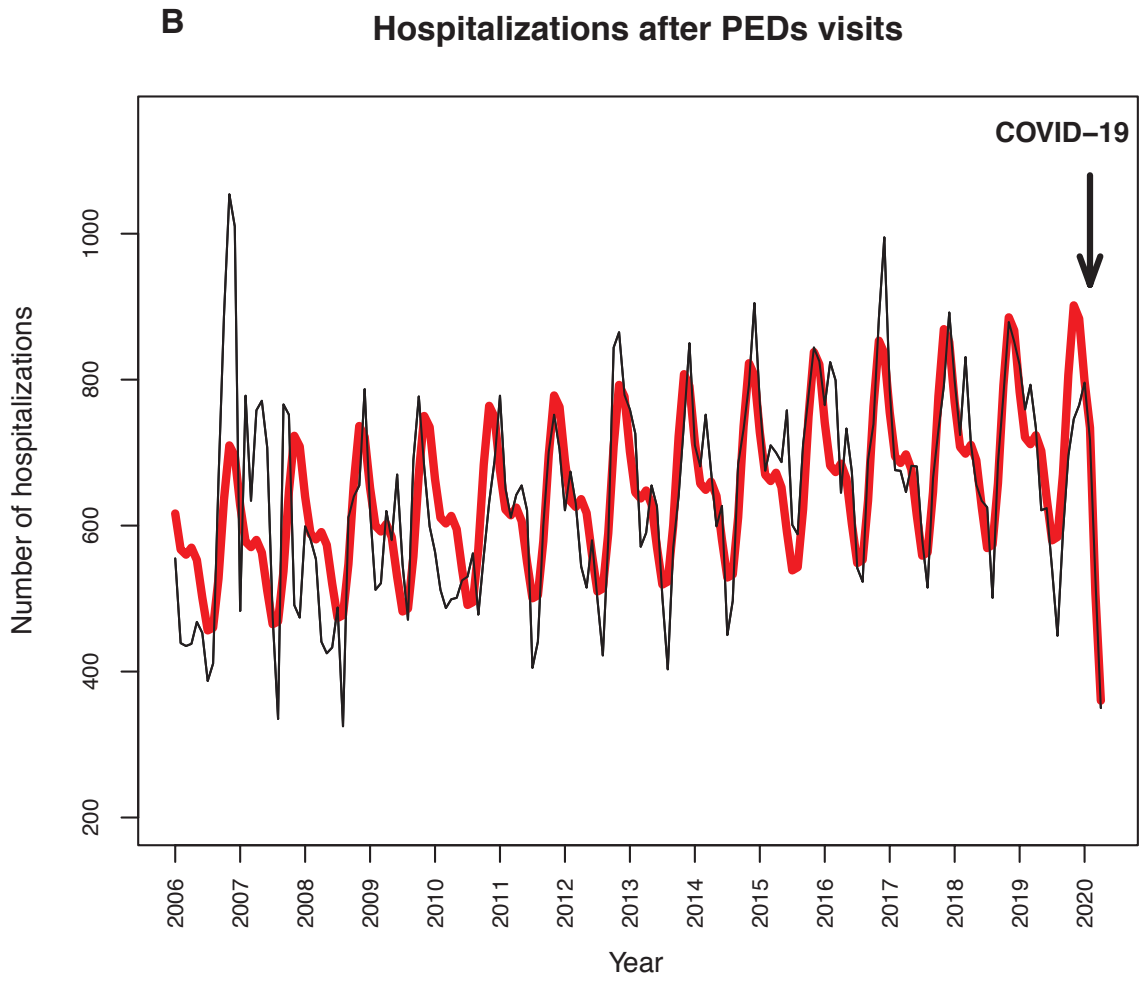
Appendix Figure 1. Evolution of Kawasaki disease and overall hospital admissions from pediatric emergency department from 2005 to 2020.

A. Evolution of Kawasaki disease over time, N=230.



The black line depicts the observed data. The bold red line depicts the model estimates based from the quasi-Poisson regression model. The vertical black arrows indicate the H1N1 and COVID-19 outbreak (respectively: November-December 2009 and March-April 2020).

B. Hospital admission following pediatric emergency department visits, N=110,824.



The black line depicts the observed data. The bold red line depicts the model estimates based from the quasi-Poisson regression model. The vertical black arrows indicate the COVID-19 outbreak (March-April 2020).

Appendix table 1: change in Kawasaki Disease frequency during SARS-CoV-2 and H1N1 outbreaks.

Outcome	Coefficient Estimate	Standard error	P value
*Absolute number of KD over time**			
SARS-CoV-2	1·603	0·482	0·0010
H1N1	1·294	0·571	0·0053
*Rate of KD per 100 hospital admissions**			
SARS-CoV-2	2·726	0·796	0·0008
H1N1	1·332	0·456	0·0040

*: Analysis by quasi-Poisson regression modelling. Abbreviation: KD: Kawasaki disease.

Appendix table 2: STROBE Statement—checklist of items that should be included in reports of observational studies

	Item No.	Recommendation	Page No.	Relevant text from manuscript
Title and abstract	1	(*a*) Indicate the study's design with a commonly used term in the title or the abstract	5	Abstract: "We conducted a quasi-experimental interrupted time series analysis over the last 15 years in a tertiary centre"
		(*b*) Provide in the abstract an informative and balanced summary of what was done and what was found	5	
Introduction				
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported	6	
Objectives	3	State specific objectives, including any prespecified hypotheses	7	"Here, we examined whether the outbreak of COVID-19 is associated with an increase of KD in a tertiary hospital in the French epicenter of COVID-19."
Methods				
Study design	4	Present key elements of study design early in the paper	8	"We conducted a quasi-experimental interrupted time series analysis based on a prospective record of all KD patients admitted over the past 15 years to a tertiary center, Robert Debré University Hospital, in Paris, France."
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	8	
Participants	6	(*a*) *Cohort study*—Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up *Case-control study*—Give the eligibility criteria, and the sources and methods of case ascertainment and control selection. Give the rationale for the choice of cases and controls *Cross-sectional study*—Give the eligibility criteria, and the sources and methods of selection of participants	8	"all KD patients admitted over the past 15 years to a tertiary center, Robert Debré University Hospital, in Paris, France"
		(*b*) *Cohort study*—For matched studies, give matching criteria and number of exposed and unexposed		

		Case-control study—For matched studies, give matching criteria and the number of controls per case		
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable	8	"The main outcome was the number of KD cases over the study period. Secondary outcomes were the number of hospital admissions following pediatric emergency department visits, and the proportion of positive nasopharyngeal multiplex PCR over time."
Data sources/ measurement	8*	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group	*8*	
Bias	9	Describe any efforts to address potential sources of bias	8	
Study size	10	Explain how the study size was arrived at	8	"all KD patients admitted over the past 15 years to a tertiary center,"

Continued on next page

Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	8	"The outcomes were analyzed by quasi-Poisson regression, accounting for seasonality, secular trends, and overdispersion of data."
Statistical methods	12	(*a*) Describe all statistical methods, including those used to control for confounding	9	
		(*b*) Describe any methods used to examine subgroups and interactions	9	
		(*c*) Explain how missing data were addressed	9	"all KD patients admitted over the past 15 years to a tertiary center,"
		(*d*) *Cohort study*—If applicable, explain how loss to follow-up was addressed *Case-control study*—If applicable, explain how matching of cases and controls was addressed *Cross-sectional study*—If applicable, describe analytical methods taking account of sampling strategy	NA	
		(*e*) Describe any sensitivity analyses	9	
Results				
Participants	13*	(a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed	10	
		(b) Give reasons for non-participation at each stage	NA	
		(c) Consider use of a flow diagram	NA	
Descriptive data	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders	10	
		(b) Indicate number of participants with missing data for each variable of interest	Table 1	
		(c) *Cohort study*—Summarise follow-up time (eg, average and total amount)	NA	
Outcome data	15*	*Cohort study*—Report numbers of outcome events or summary measures over time	Table 1	
		Case-control study—Report numbers in each exposure category, or summary measures of exposure		
		Cross-sectional study—Report numbers of outcome events or summary measures		
Main results	16	(*a*) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included	10	
		(*b*) Report category boundaries when continuous variables were categorized	NA	
		(*c*) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	NA	

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Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses	10 and appendix 3.	
Discussion				
Key results	18	Summarise key results with reference to study objectives	12	
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias	12-13	
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	13	
Generalisability	21	Discuss the generalisability (external validity) of the study results	13	
Other information				
Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based	9	"The French National Research Agency had no role in the study design, data analysis, data interpretation, and writing of the report. The first author had full access to all data and final responsibility for the decision to submit for publication."

*Give information separately for cases and controls in case-control studies and, if applicable, for exposed and unexposed groups in cohort and cross-sectional studies.

Note: An Explanation and Elaboration article discusses each checklist item and gives methodological background and published examples of transparent reporting. The STROBE checklist is best used in conjunction with this article (freely available on the Web sites of PLoS Medicine at http://www.plosmedicine.org/, Annals of Internal Medicine at http://www.annals.org/, and Epidemiology at http://www.epidem.com/). Information on the STROBE Initiative is available at www.strobe-statement.org.

References.

1 Kobayashi T, Saji T, Otani T, *et al.* Efficacy of immunoglobulin plus prednisolone for prevention of coronary artery abnormalities in severe Kawasaki disease (RAISE study): a randomised, open-label, blinded-endpoints trial. *Lancet* 2012; **379**: 1613–20.

2 Kanegaye JT, Wilder MS, Molkara D, *et al.* Recognition of a Kawasaki disease shock syndrome. *Pediatrics* 2009; **123**: e783-789.