



**University of
Zurich** ^{UZH}

Epidemiology, Biostatistics and Prevention Institute

**CORONA
IMMUNITAS**

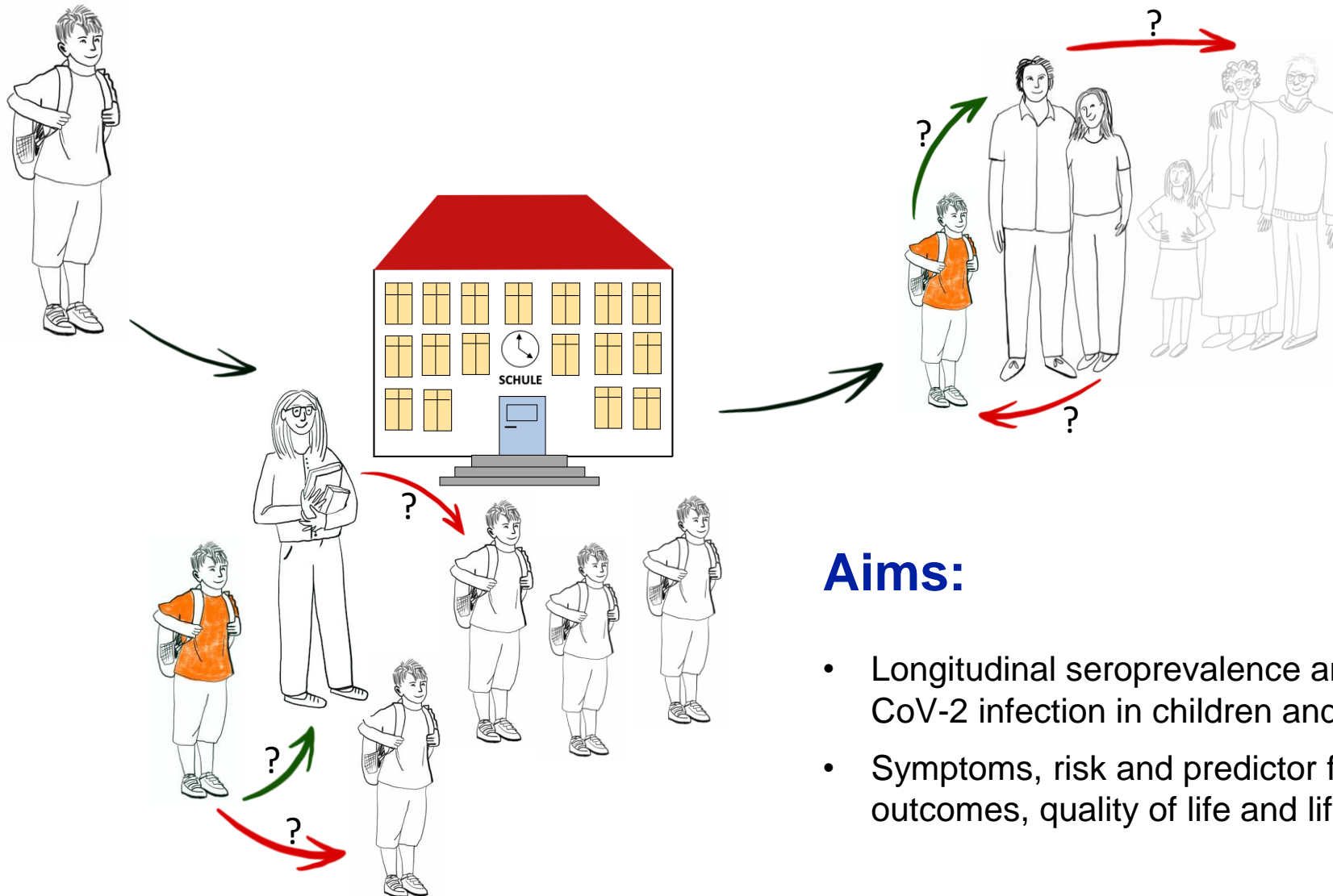
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Descriptive of mental health in school children during the COVID-19 pandemic

Gabriela P. Peralta, MPH, Ph.D

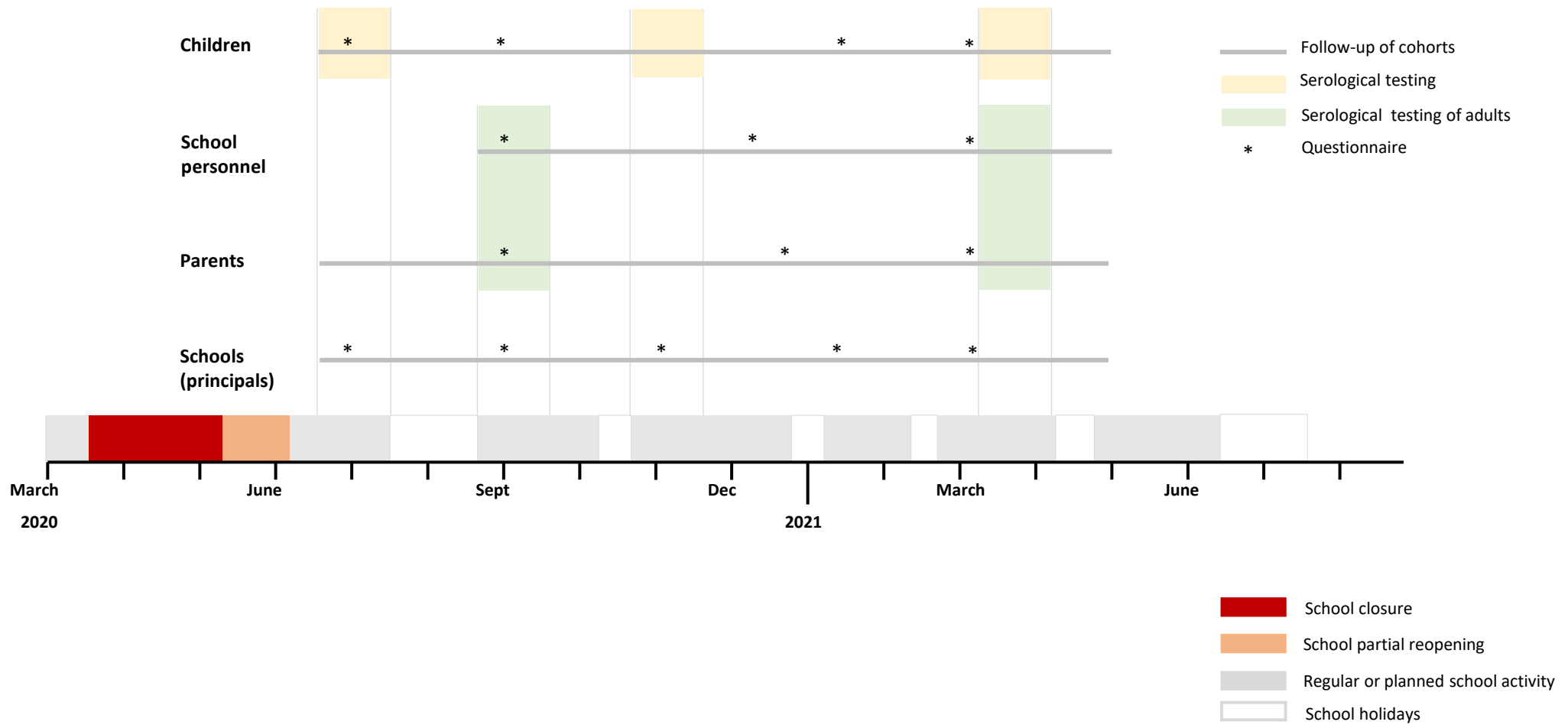
Zurich, 9 March 2021



Aims:

- Longitudinal seroprevalence and potential clustering of SARS-CoV-2 infection in children and adolescents attending school
- Symptoms, risk and predictor factors for individual and school outcomes, quality of life and lifestyle changes.

Timeline

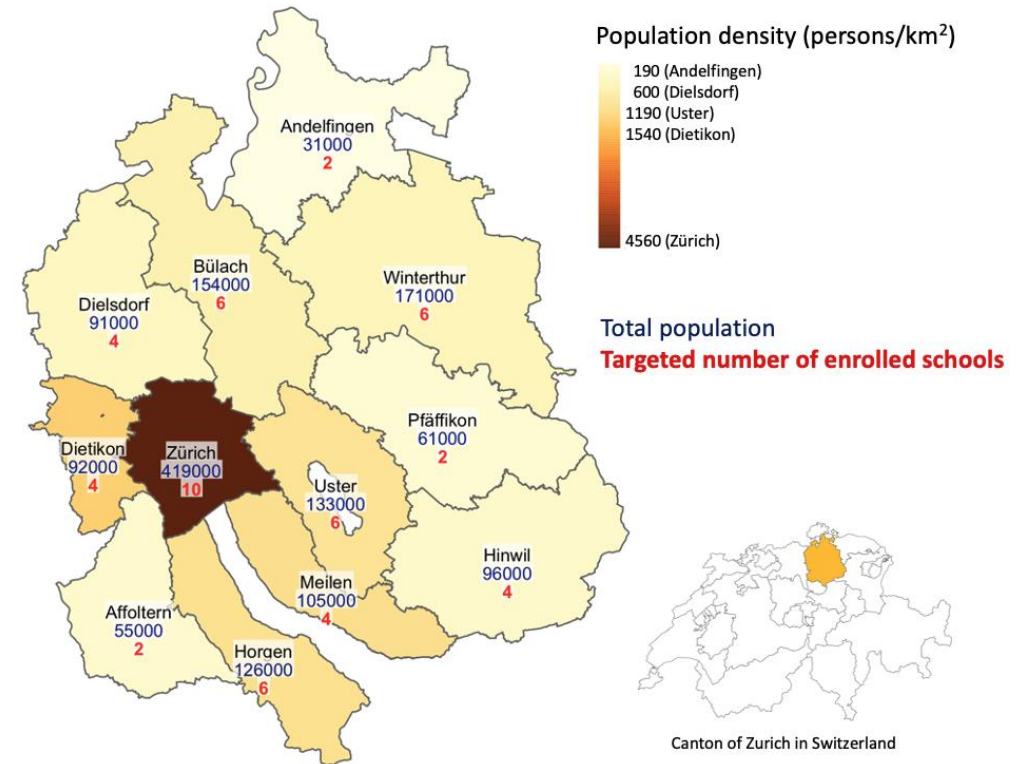


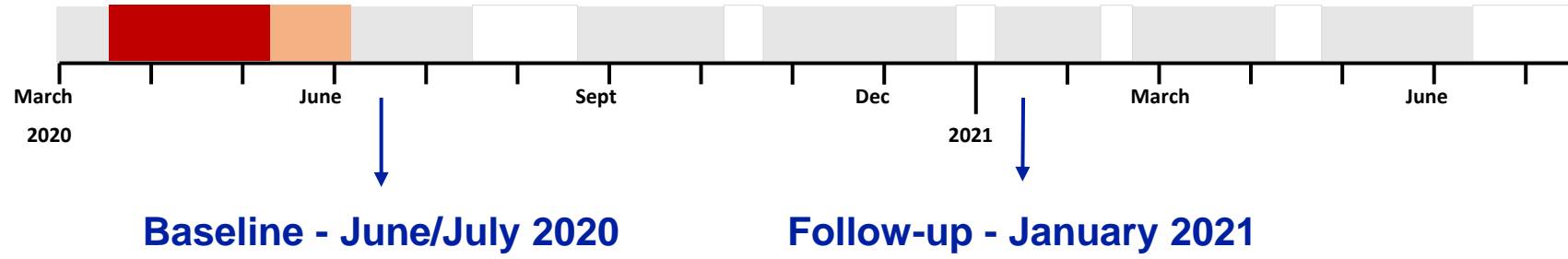
Participant cohorts

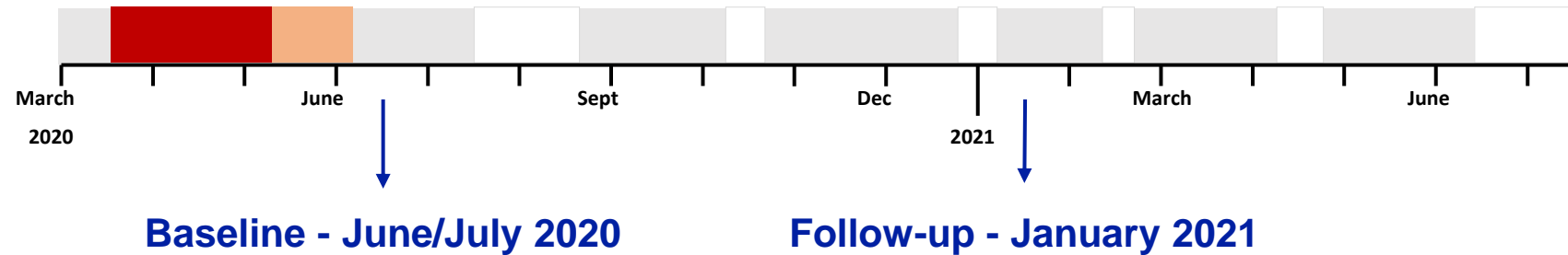
- 55 schools from all districts
- 276 classes
- ~2600 children
- ~2000 parents (1238 households)
- ~1600 school personnel

Data

- Serological
- Questionnaires: symptoms, PCR results, situation of the family... mental health and lifestyle

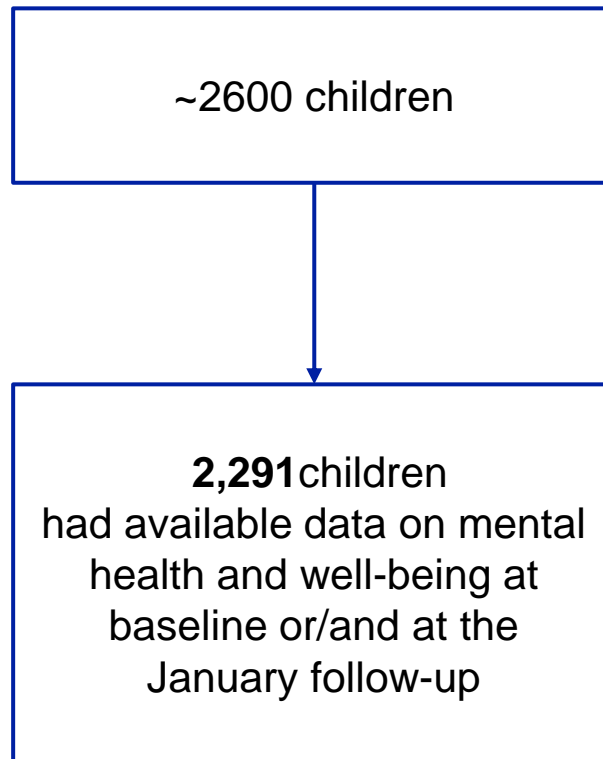






- **Stress → How would you rate the stress in your child's life now?**
[no stress =1 to extreme stress=6]
- **Self-rated health → How would you describe your health?**
[poor, fair, good and excellent]
- **Mean life satisfaction → Where do you stand on this ladder when you look at your current life**
[worst possible life=0 to best possible life=10]
- **Individual health (psychological) complains → Feeling low/sad, feeling nervous, difficulties falling asleep and bad temper or irritability**
[rarely or never=0 to about every day=4]
- **Quality of life → KINDL-R questionnaire**
[physical, emotional, self-esteem, family, friends, school, total]

Study population



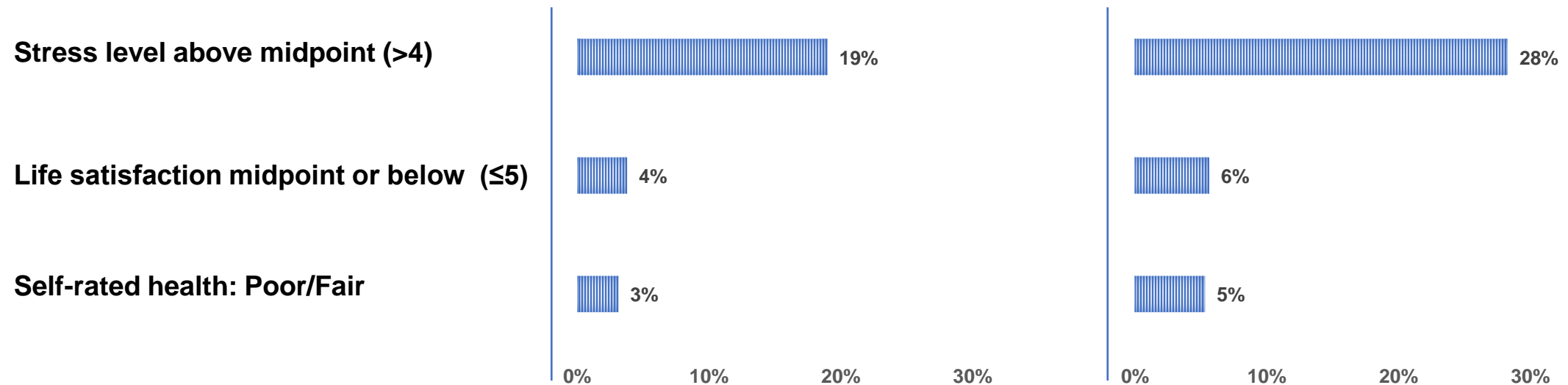
Baseline characteristics	
	N(%) or mean (SD)
Sex. Girls	1,176 (51.3)
Age (years)	11.4 (2.5)
≤10 years	677 (30)
>10 years	1,579 (70)
Parents education level	
Low/middle	633 (28.8)
High	1,566 (71.2)
Maternal nationality	
Swiss	1,713 (75.9)
Non-Swiss	545 (24.1)

Stress level, life satisfaction and self-rated health

	BASELINE	FOLLOW-UP
Stress level – mean (SD)	2.4 (1.2)	2.7 (1.2)
Life satisfaction – mean (SD)	8.3 (1.3)	8.0 (1.4)
Self-rated health – % Excellent	47 %	44%

Stress level, life satisfaction and self-rated health

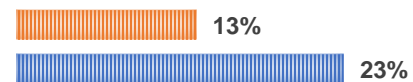
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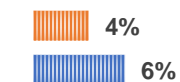
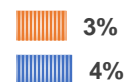
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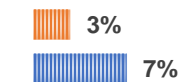
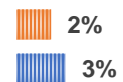
Stress level above midpoint (>4)



Life satisfaction midpoint or below (≤ 5)



Self-rated health: Poor/Fair



0% 10% 20% 30% 40%

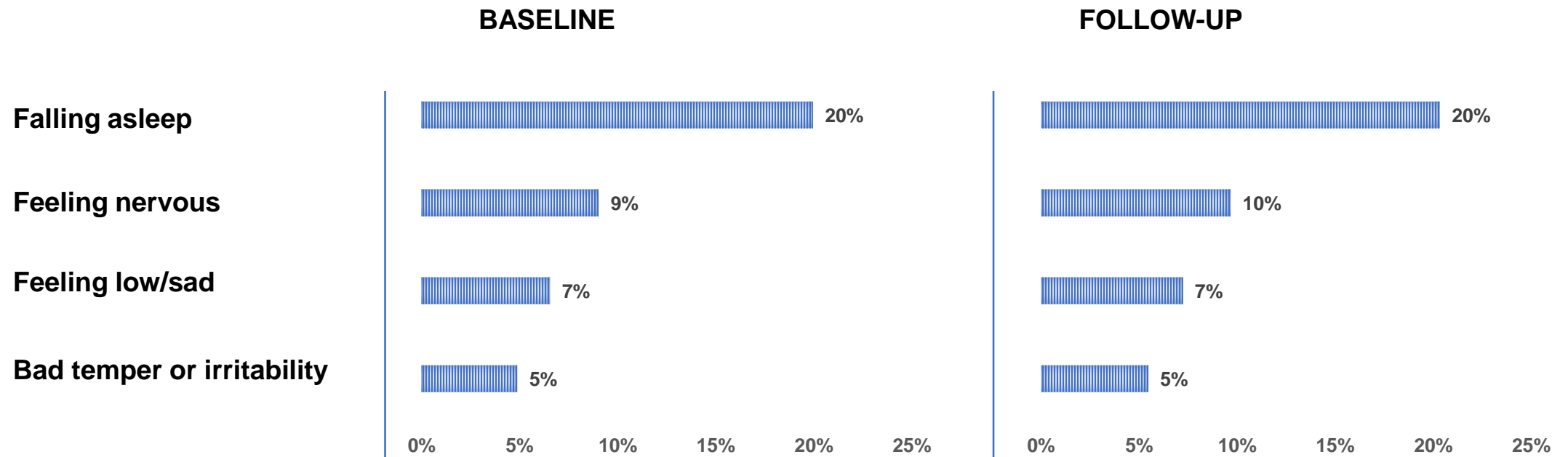
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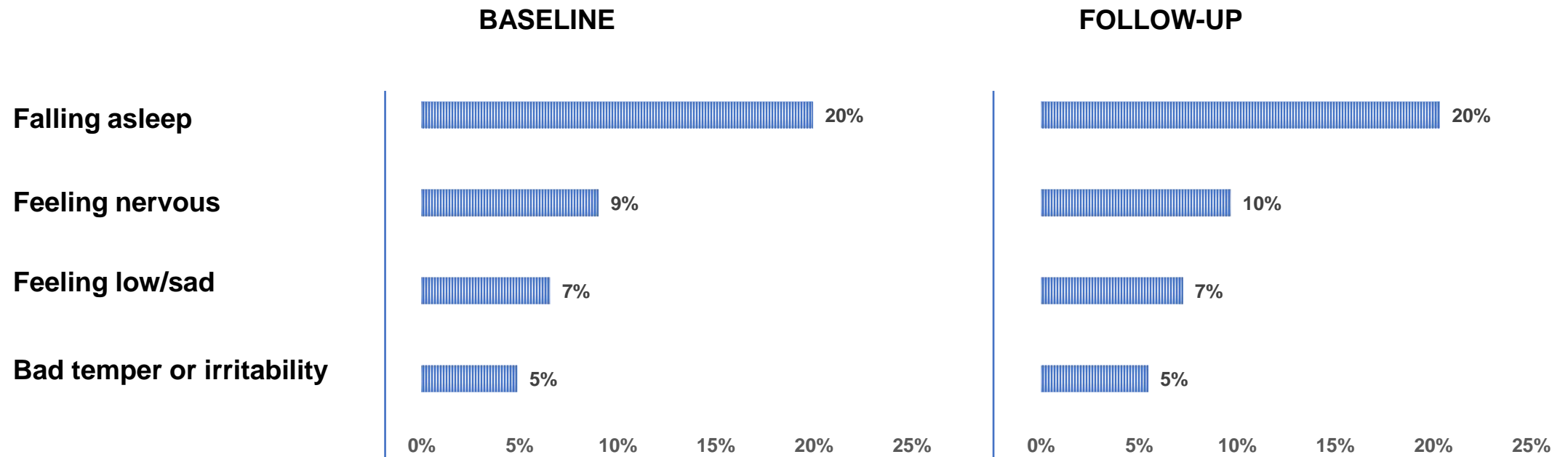
Individual health complains

Proportion of children reporting health complain several times a week or every day



Individual health complains

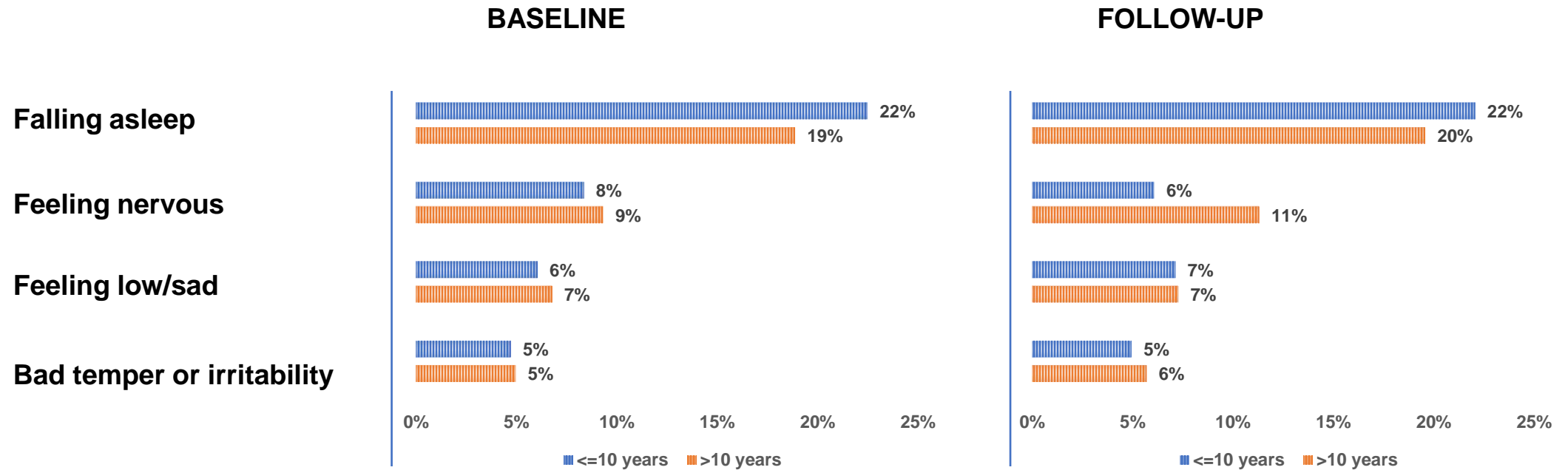
Proportion of children reporting health complain several times a week or every day



Approximately 14% of the study sample reported 2 or more health complains more than once a week, both at baseline and follow-up

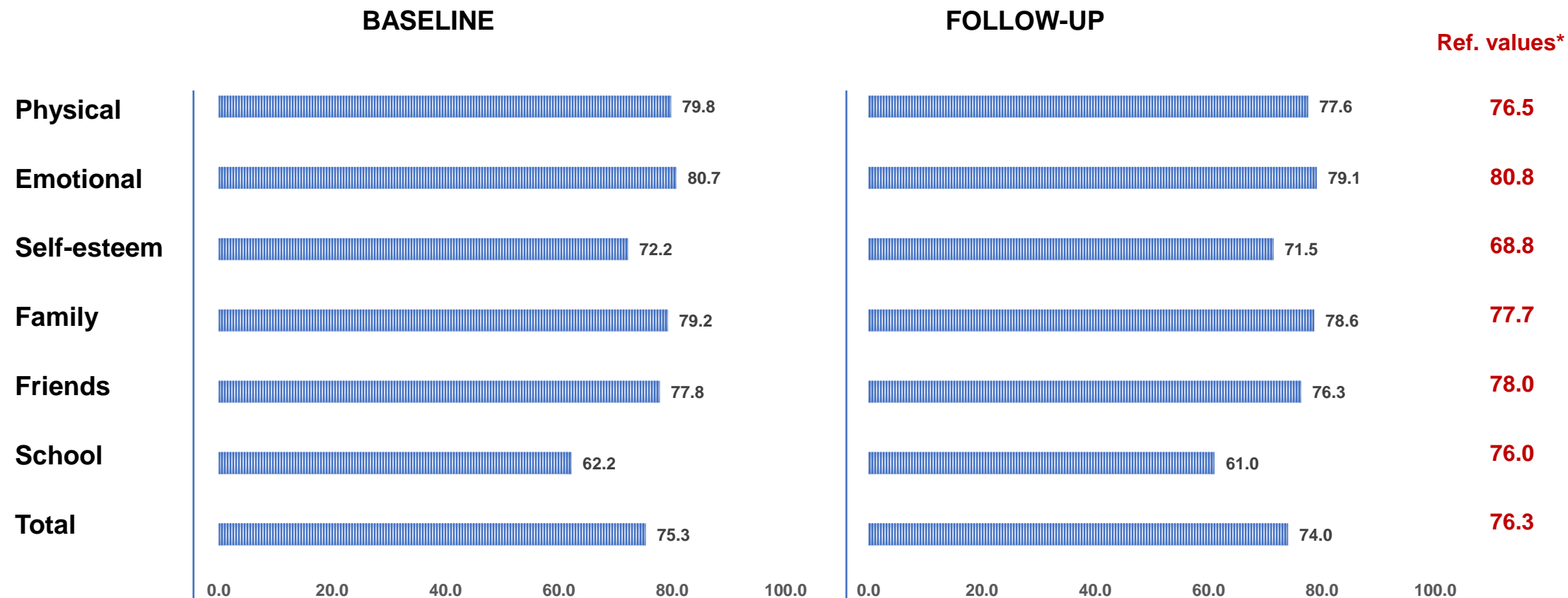
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Quality of life: KINDL-R

Average scores (0-100)



* Reference values: Ravens-Sieberer. Eur Child Adolesc Psychiatry 2008

Quality of life: KINDL-R

Average scores (0-100)

BASELINE

FOLLOW-UP

Ref. values*



* Reference values: Ravens-Sieberer. Eur Child Adolesc Psychiatry 2008

Summary

- The proportion of children reporting high levels of stress increased over time, with the highest prevalence observed in children older than 10 years (23% and 36% at baseline and follow-up, respectively).
- The most common health complain was difficulties in getting to sleep, both at baseline and follow-up (20%).
- Average parent-reported quality of life (KINDL-R) was similar to reference values, except for the “school” sub-scale.



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THANK YOU!

Ciao Corona team: Prof. Susi Kriemler, Prof. Milo Puhan, Dr. Thomas Radtke, Dr. Agne Ulyte.

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www.ciao-corona.ch