

A new challenge: post-COVID syndrome in adolescents

Perrin A¹, Posfay-Barbe KM², Caflisch M¹

¹Adolescent clinic, ²Division of General Pediatrics, Department of Woman, Child, and Adolescent Medicine, Geneva University Hospitals, Geneva, Switzerland
Covidlong.ped@hcuge.ch

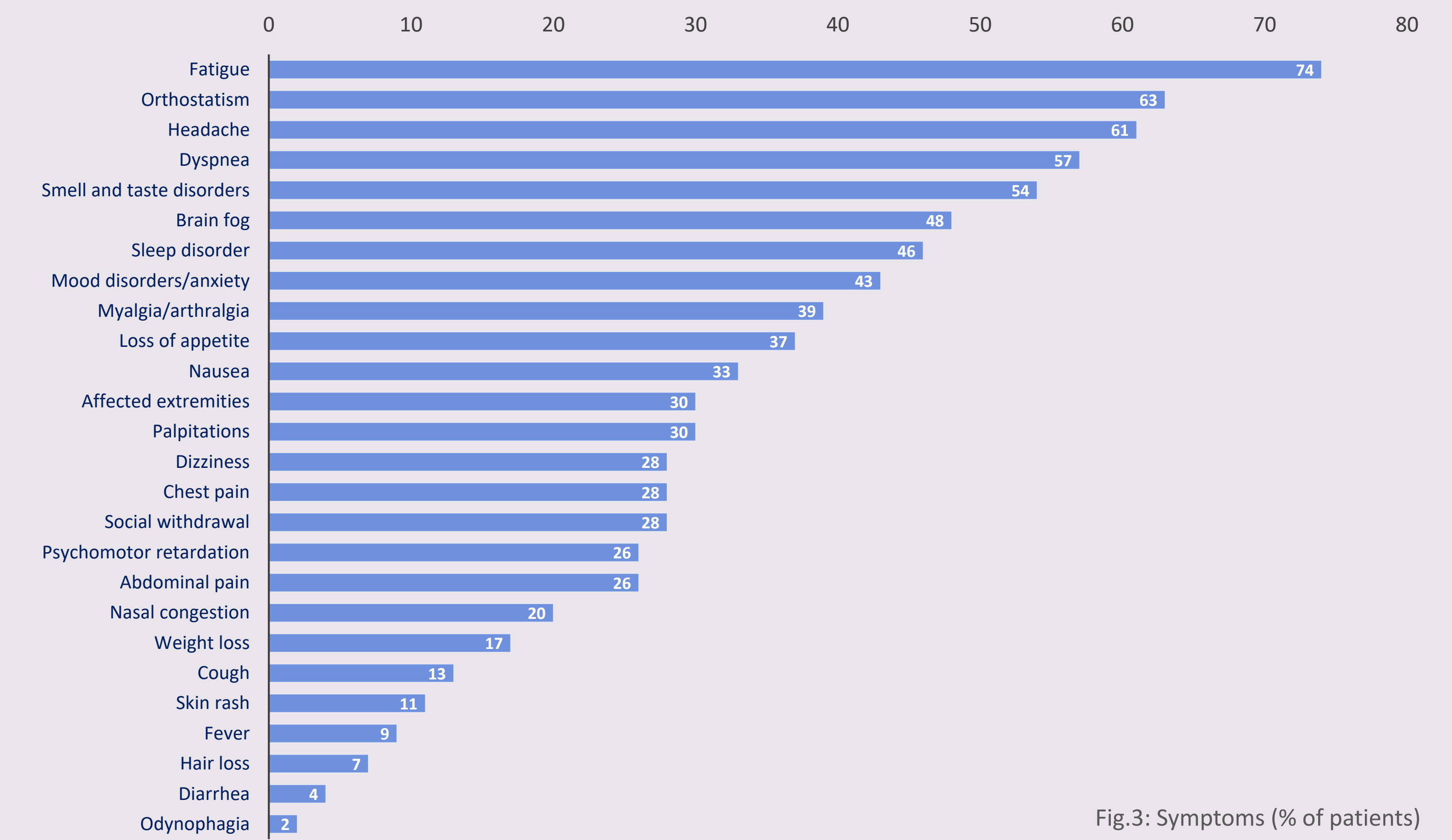
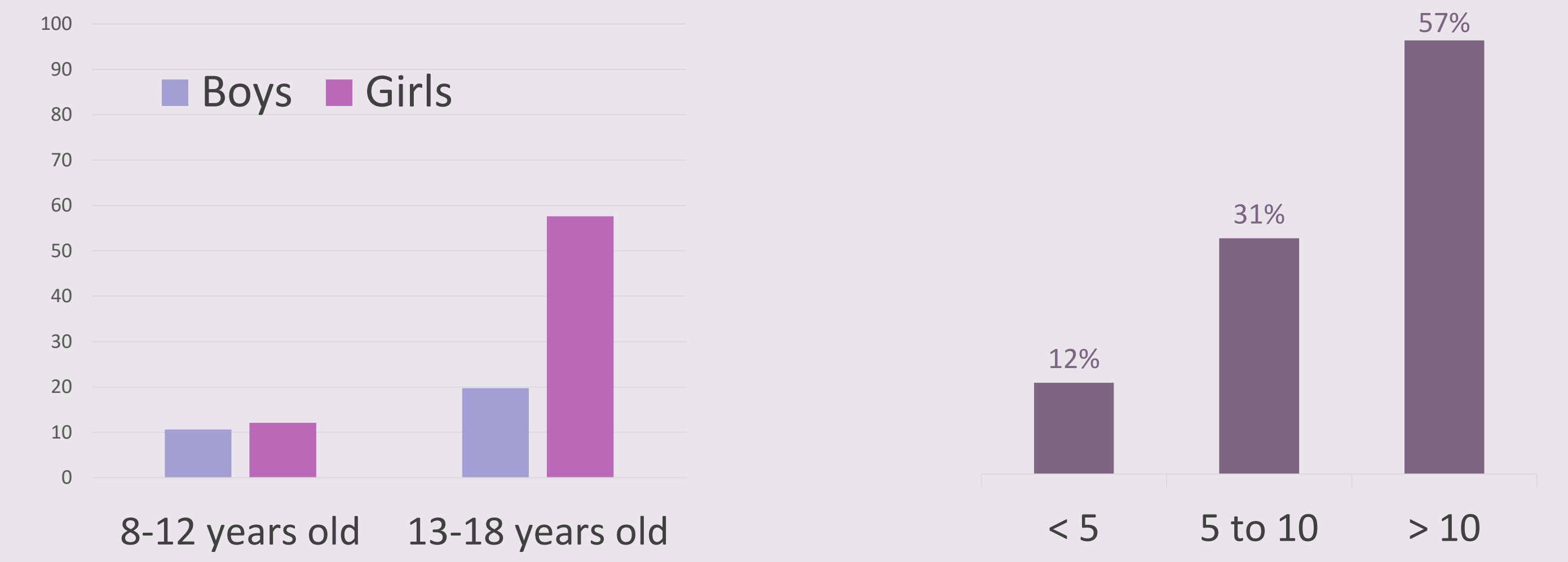
Introduction

Post-COVID syndrome (or long COVID) is a set of symptoms occurring after a documented SARS-CoV-2 infection and persisting for more than 2 months. The pediatric population is also affected, especially pre-adolescents and adolescents.

Persistent symptoms can have a strong impact on quality of life and schooling. For this reason, the Division of General Pediatrics at the University Hospital of Geneva has set up in May 2021 a specific consultation for adolescents with post-COVID syndrome, offering global and multidisciplinary care.

Clinical presentation

To date 75 patients have been addressed to our consultation by their general practitioner. The mean age is 14 years, 2/3 are girls (fig.1). The symptoms are multiple (fig.2), non-specific, and are similar to those described in adults (fig.3). In teenagers, symptoms can overlap with other diagnosis, as chronic fatigue syndrome, depression and functional disorders.

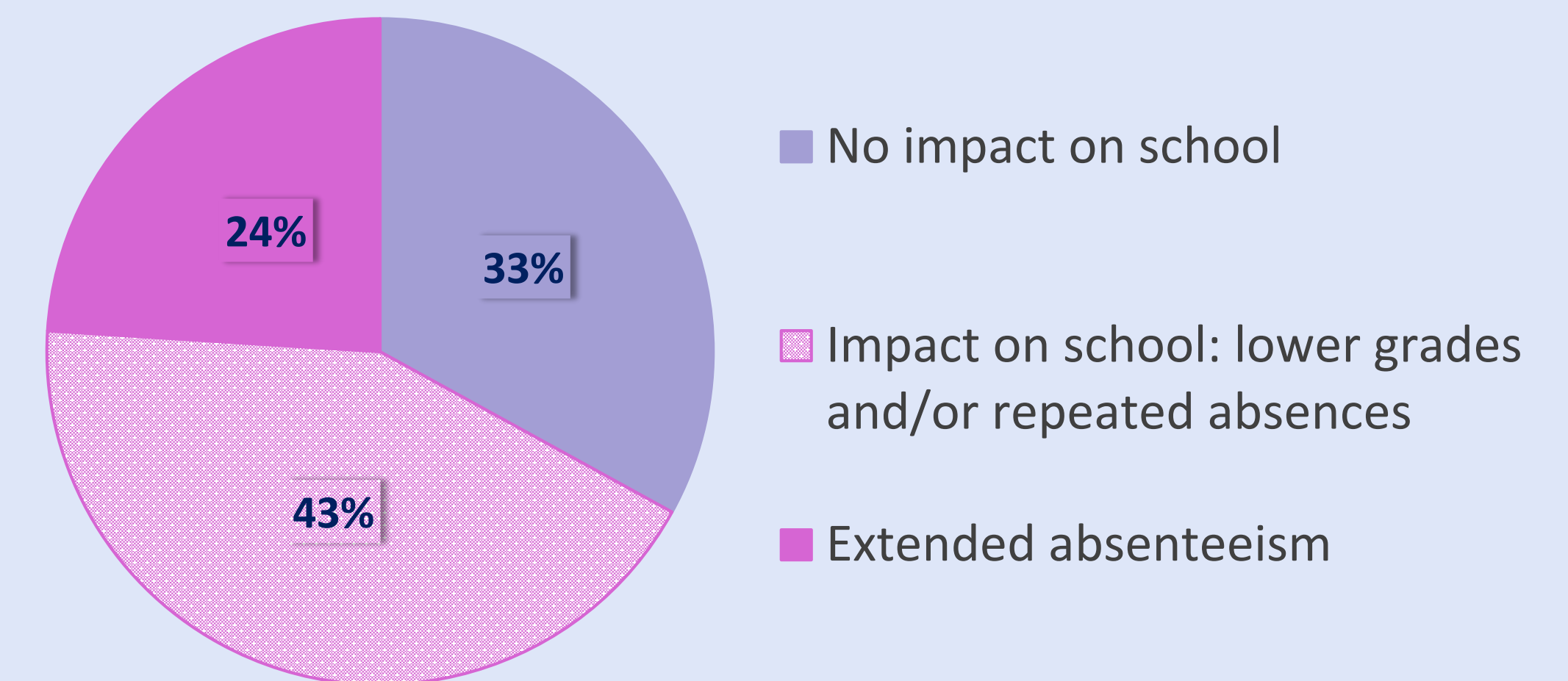


Functional impact

The PedsQL questionnaire (assessing 4 aspects of teenagers' daily life) shows an impact of these symptoms on the quality of life, schooling and daily activities being the most affected. Reassuringly, peer relationships seem preserved (table 1).

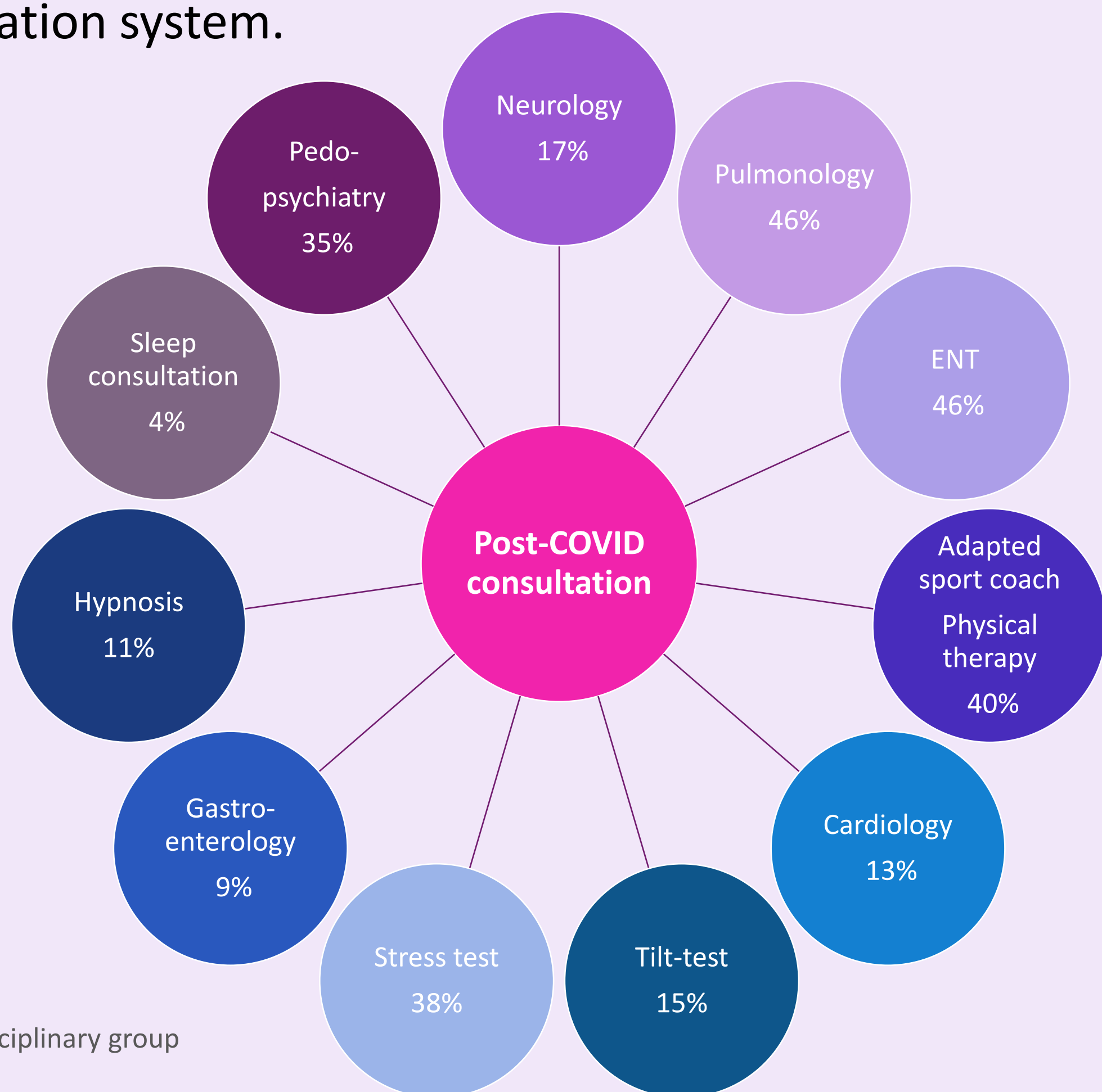
2/3 of patients report an impact on school performance, and 1/4 have extended school absenteeism (fig.4). The Adolescent Depression Rating Scale shows that 44% of our patients are at risk for depression. 1/3 needs a psychological support.

Questionnaires	Average	Min-max	Comments
Fatigue severity scale	41	9-63	Significant fatigue if score >36/63
Adolescent Depression Rating Scale (ADRS)	3.3	0-9	Risk of depression if score >4/10
Quality of life (PedsQL)			
Global score	60%	22-94%	100% is the best quality of life possible
Per section:			
Health / activities	55%	9-100%	
Emotions	55%	5-100%	
Relationship with peers	82%	40-100%	
School	47%	5-95%	



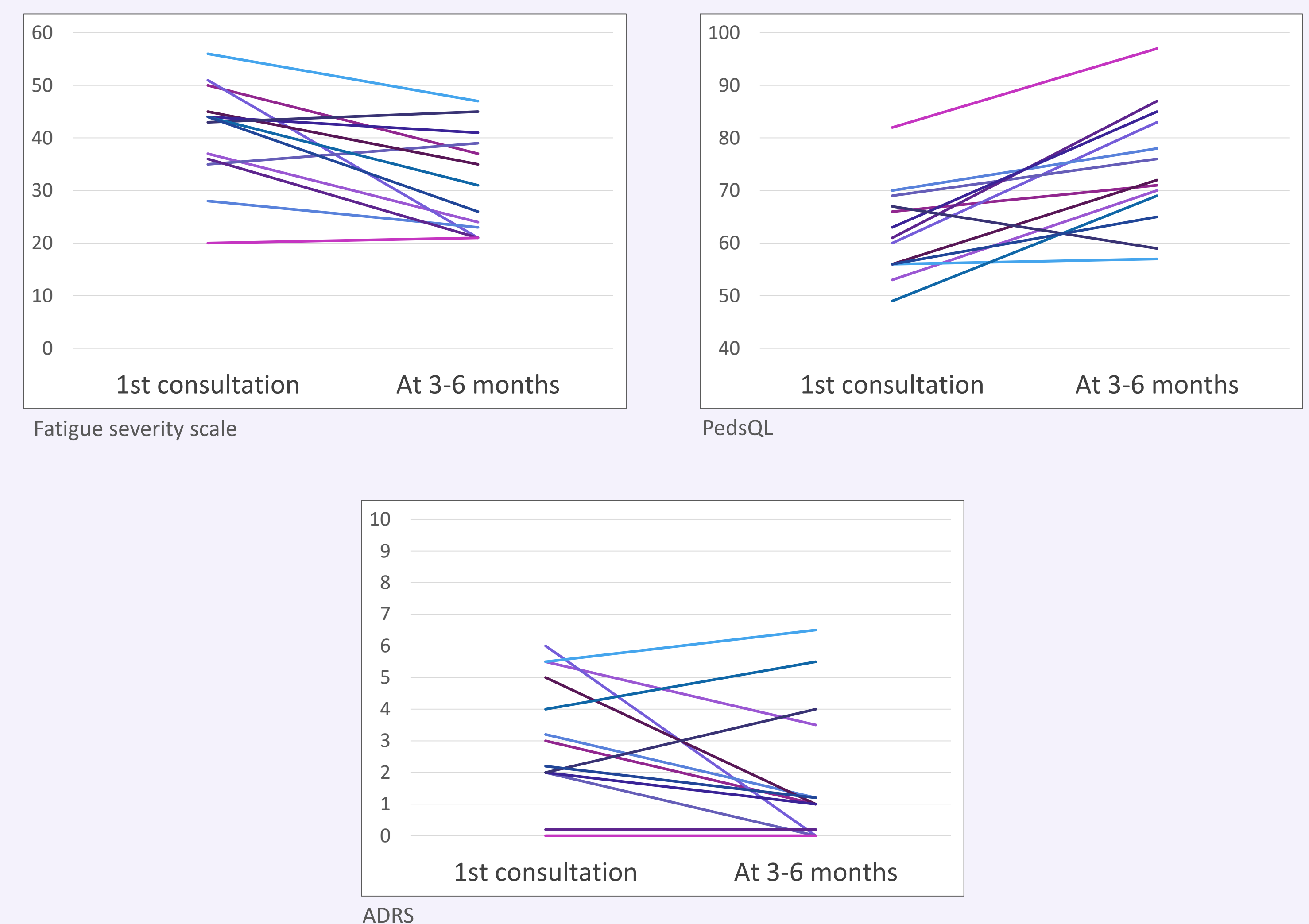
Global care

If necessary, patients can be referred to additional exams and/or to specialized consultations in our multidisciplinary group. Patients with symptoms due to physical activity (fatigability, shortness of breath, dysautonomia) can benefit from a progressive and individualized reconditioning program with an adapted sport coach. We offer a global follow-up to patients and families. School attendance is supported by making individual arrangements if required, through close collaboration with the education system.



Evolution

Almost half of our patients showed complete recovery to this date. Repetition of the questionnaires 3-6 months after the beginning of the follow-up shows a trend towards improvement, however a longer follow-up period would be necessary to confirm these observations.



Conclusion

Post-COVID syndrome is more frequent in adolescents than pre-adolescents, and girls are more affected. Symptoms are multiple, and can have a strong impact on quality of life.

The biggest concern in this age group is the impact on school and the risk of social withdrawal. A global and multidisciplinary perspective is necessary, with close collaboration with the patient's network.

