Tests, treatments and procedures at risk of inappropriateness in Italy

that Physicians and Patients should talk about.

Five Recommendations from the Italian Society of Pediatrics (SIP) on SARS-CoV-2 Infection in Pediatric and Adolescent Ages

1	**Discourage pediatric patients attending the Emergency Room with mild symptoms suggestive of COVID-19 or if they are contacts of SARS-CoV-2 positive patients in the absence of symptoms and do not delay access to Health Services if children and adolescents present with any clinical condition indicative of possible serious illness (whether or not related to presumed COVID-19 infection).**
	Children appear to be less affected by COVID-19 than adults, with a milder clinical presentation and a significantly lower mortality rate. However, serious complications, such as temporarily COVID-19-related multisystem inflammatory syndrome (MIS-C), which can be associated with myocardial damage, can occur in children. The decision whether to hospitalize a positive child is essentially based on three factors: disease severity, comorbidities, and family compliance. There is unanimous agreement on the indication for hospitalization in moderate to critical forms and in febrile infants under 3 months of age. Children with mild symptoms can be managed at home with telephone surveillance, possible visit by the treating pediatrician or pediatric Continuity of Care Units (USCA) and educating caregivers on clinical signs of deterioration that require access to health services (such as respiratory distress, chest pain, cyanosis, altered consciousness, oliguria). Do not delay access to Health Services if the child/adolescent presents with any clinical condition indicative of a possible serious illness.
2	**Do not administer drug therapy other than symptomatic drugs in pediatric and adolescent cases of COVID-19 for which hospitalization is not required.**
	Symptomatic treatment is the same as that used for common respiratory infections and gastroenteritis. In the majority of symptomatic cases of pediatric and adolescent SARS-CoV-2 infection, symptomatic therapy alone with acetaminophen or ibuprofen in the absence of dehydration is recommended. In case of respiratory symptoms that may benefit from inhalation therapy with bronchodilators and/or corticosteroids, a spacer is preferred over a nebulizer to reduce the spread of viral particles in the air. In case of diarrhea or vomiting, proper hydration with oral rehydration solutions should be ensured. Antibiotic therapy is not indicated unless there is a likely bacterial complication. The therapeutic, immunomodulatory, or antiviral use of azithromycin or chloroquine/hydroxychloroquine is not recommended.
3	**Do not modify, reduce, or discontinue usual therapies without a specific clinical indication in children and adolescents with chronic disease and COVID-19.**
	Children with chronic illnesses are a high-risk population from an infectious standpoint and, therefore, may be susceptible to developing more severe SARS-CoV-2 illness. Of relevance is the recommendation to educate children and their families about preventive behaviors: social distancing, use of appropriate masks including size, and hand cleaning as well as proper nutrition, adequate exercise, and regular sleep. In the most acute epidemic phases, it is better to reduce clinical controls to those strictly necessary using telemedicine resources, but ensuring direct and timely contact if suspicious symptoms appear (especially in case of respiratory or gastrointestinal involvement). There is no indication to modify, reduce, or suspend usual therapies without a specific clinical indication.
4	**Do not postpone routine immunization or modify usual pediatric preventive and treatment measures in both the territory and hospital during the circulation of SARS-CoV-2.**
	In children in the first two years of life, delays of 3-6 months in scheduled vaccination sessions were observed during the COVID-19 pandemic, while in adolescents vaccination coverage for booster doses dropped by more than 10%. In addition, late diagnoses of chronic diseases (e.g., type 1 diabetes, oncological diseases) were reported due to delayed access to Emergency Room, and the percentage of children and adolescents who underwent health check-ups by their primary care pediatricians was reduced. All this shows that the efforts made over the years on prevention and early diagnosis of disease in pediatric age may be wasted, with serious health risks in the immediate future.
5	**Avoid as much as possible the closure of educational services and schools by carefully assessing the need for it with the competent authorities, in order to protect the psychophysical health and promote the development of children and adolescents.**
	In pediatric age, SARS-CoV-2 infection is less severe than in adults. Children become infected predominantly within families, while transmission within educational settings is less frequent. During a COVID-19 pandemic, stressful factors such as lack of social contacts and loss of school routines have been found to be associated with neuropsychiatric sequelae, even in the long term. In particular, several studies have found high levels of anxiety, depression, and post-traumatic stress disorder in quarantined children and adolescents. For these reasons, among the various interventions of social isolation implemented as preventive measures to contain the epidemic, the closure of educational services and schools is the one that most needs to be evaluated with the competent authorities, in view of the important social, behavioral and psychological fallout.

Please note that these items are provided only for information and are not intended as a substitute for consultation with a clinician. Patients with any specific questions about the items on this list or their individual situation should consult their clinician.

released: February 2021

How this list was created

A writing committee composed of the Directors of the Pediatrics Units of Emilia-Romagna Region was created, supplemented by experts from the same Units, and consensus on the content was reached after several rounds of review among the members of the writing committee. Each of the participants was asked to identify in daily activities one or more procedures observed during the COVID pandemic that were not beneficial to the patient at that particular time and were potentially risky. The shared text was presented to the President and Board of Directors of the Italian Society of Pediatrics (SIP) and further shared with the Presidents and Boards of Directors of the Regional Sections of the SIP.

Sources

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Slow Medicine, an Italian movement of health professionals, patients and citizens promoting a Measured, Respectful and Equitable Medicine, launched the campaign **"Doing more does not mean doing better- Choosing Wisely Italy"** in Italy at the end of 2012, similar to Choosing Wisely in the USA. The campaign aims to help physicians, other health professionals, patients and citizens engage in conversations about tests, treatments and procedures at risk of inappropriateness in Italy, for informed and shared choices. The campaign is part of the Choosing Wisely International movement. Partners of the campaign are the National Federation of Medical Doctors' and Dentists' Orders (FNOMCeO), that of Registered Nurses' Orders (FNOPI), the Academy of Nursing Sciences (ASI), National Union of Radiologists (SNR), Tuscany regional health agency, PartecipaSalute, Altroconsumo, the Federation for Social Services and Healthcare of Aut. Prov. of Bolzano, Zadig. www.choosingwiselyitaly.org; www.slowmedicine.it

The **Italian Society of Pediatrics (SIP)** was born in 1898 and, with its 11 thousand members, represents the common home of all Italian pediatricians because University, hospital, family and community pediatricians participate. The mission of SIP is to promote and protect the physical and mental health of newborns, children and adolescents, of all cultures and ethnicities, defending their rights in society from conception. A total of 19 Regional Sections belong to the SIP. SIP carries out publishing, training and research activities, NON PROFIT. Further information is available at the link https://sip.it/