RECOMMENDATIONS

Recommendations of the Polish Paediatric Society and the National Consultant in the field of paediatrics regarding outpatient care for children during the COVID-19 pandemic caused by SARS-CoV-2

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ABSTRACT

The novel severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), which causes the disease termed coronavirus disease 2019 (COVID-19), emerged in China in early December 2019. The virus has rapidly spread causing a global pandemic with a major burden on the health care system and economy. The outbreak was declared a public health emergency by the World Health Organisation on January 30, 2020.

The presented guidelines describe the basic principles of outpatient care for children during the COVID-19 pandemic caused by SARS-CoV-2. The guidelines were developed based on the conducted literature review, content from websites of scientific societies, and international recommendations. This paper presents guidelines concerning the outpatient care for sick children, children with a documented SARS-CoV-2 infection, or for children of mothers with confirmed COVID-19. Moreover, the guidelines discuss aspects associated with vaccinations, preventive visits for healthy children, and the monitoring of a child's safety and mental health status.

KEY WORDS:

COVID-19, SARS-CoV-2, recommendations.

The Polish Paediatric Society and the National Consultant in the field of Paediatrics (hereinafter referred to as the "National Consultant") present recommendations on the outpatient care for healthy and sick children during the COVID-19 pandemic caused by SARS-CoV-2.

In outpatient and inpatient conditions, the principles of safe respiratory isolation should be followed during the COVID-19 pandemic. Every child can be infected with SARS-CoV-2, but more often, the cause of the disease is different. The limitation of the number of regular visits does not increase the risk for sick children. Therefore, we should find a balance between the level of preparedness of medical facilities and the ability to manage COVID-19 patients as well as to cover the current needs of individual patients.

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A. RECOMMENDATIONS ON THE CARE FOR SICK CHILDREN [1]

Remote medical visits are recommended **except** for the following situations:

- 1. newborns and infants aged below 12 weeks with a fever > 38°C,
- 2. infants aged from 12 to 24 weeks with a fever > 39°C,
- 3. children aged over 24 weeks with a fever > 40°C,
- 4. children aged over 2 years with a fever persisting for more than 2 days,
- 5. children regardless of age with fever persisting for more than 3 days or with a fever > 40 °C,
- 6. children presenting the following signs and symptoms: somnolence or agitation; anxiety; failure to calm the child down during nursing or hugging; symptoms suggesting meningoencephalitis; severe headache; rash of unknown origin; seizures; recurrent vomiting; diarrhoea; signs of dehydration (dry mouth, fewer wet diapers or decreased urination, difficulties with fluid intake).

Based on the available evidence, children seem to have a lower risk of developing COVID-19 compared with adults, who represent the majority of the already diagnosed cases.

Children with COVID-19 have exhibited mild symptoms similar to common cold symptoms, such as fever, runny nose, and cough. Other reported symptoms have also included vomiting and diarrhoea.

In summary, if the doctor decides that a physical examination is not necessary, they can conduct a remote medical visit (by phone or video). If the patient requires a medical appointment, the doctor should use personal protective equipment (PPE) according to the current recommendations.

- B. RECOMMENDATIONS ON THE CARE FOR CHILDREN WITH A DOCUMENTED SARS-COV-2 INFECTION OR CHILDREN OF MOTHERS DIAGNOSED WITH COVID-19 [2]
- 1. A newborn with a documented SARS-CoV-2 infection (or at risk of developing COVID-19 after birth) not presenting clinical symptoms of COVID-19 can be discharged home into the care of a healthy carer (not their grandparents!). The doctor working at the department of neonatology should provide frequent, regular phone follow-up for 14 days after birth. Newborns can acquire SARS-CoV-2 after birth, and the infection can cause severe disease because of the undeveloped immune system of newborns.
- **2. An infant with a SARS-CoV-2 infection** can be breastfed [3].
- **3. Mothers diagnosed with COVID-19.** Temporary separation of mothers and newborns minimises the risk of a postnatal infection of the newborn through the

mother's respiratory secretions. Therefore, newborns born from mothers with COVID-19 should stay in a separate room.

Before discharging the newborn from the hospital, it should be ascertained whether they will stay at home with the mother or other members of the family who have tested positive for COVID-19. If so, infection transmission is probable. Moreover, without the possibility of monitoring the patient's condition at home, such a situation may be life-threatening for them.

The newborn should be isolated from sick family members (by being placed in an isolation facility). If that is not possible, a healthy child should stay in the department of neonatology for 14 days until their mother or another carer recovers and does not pose a threat to the child's health.

In exceptional cases, it may be acceptable for a sick mother to take care of her child.

After discharge, the mother should keep a distance of at least 2 meters from the newborn. If the mother does not keep the recommended distance, she should wear a face mask and use hand disinfectants when caring for her child. Such measures should be used until:

- a. she has no fever for at least 72 hours without taking antipyretics and at least 7 days after the onset of symptoms have passed,
- b. she has two consecutive negative SARS-CoV-2 RT-PCR test results from samples collected 24 hours apart.
- **4.** Previous studies did not confirm the presence of SARS-CoV-2 in the mother's breast milk. Mothers can pump their breast milk after following the correct breast and hand hygiene. Uninfected carers can feed an infant. If the mother wishes to breastfeed, she should follow strict preventive measures, including a face mask and meticulous breast and hand hygiene.
- 5. Standard newborn screening tests (blood tests, hearing test, exclusion of congenital heart defects) are necessary and should be carried out in line with the adopted recommendations.

C. RECOMMENDATIONS CONCERNING VACCINES [4–7]

The COVID-19 pandemic reminds us that infectious diseases do not know any borders. Regardless of the level of income or healthcare system organisation, all countries are vulnerable to threats posed by infectious diseases.

It is vital to implement a preventive vaccination plan bearing in mind the protection of healthcare workers and the vaccinated patient as well as their parent/carer. Priority should be given to the vaccination of the most vulnerable children without a history of routine immunisation.

Depending on the COVID-19 epidemiological situation in Poland, in the given province, city, or region,

and the capabilities of the healthcare facilities regarding the facility conditions and human resources controlled by the District Sanitary-Epidemiological Stations, the Polish Paediatric Society and the National Consultant recommend implementing preventive vaccinations in the following:

- 1. departments of neonatology a newborn from a COVID-19–positive mother should receive the BCG and hepatitis B vaccines.
- 2. children; patients should receive vaccinations, both mandatory and recommended, which should be administered up to the age of 24 months in line with the Preventive Vaccination Plan (PSO),
- 3. children up to the age of 18 years, according to the patient's needs and organisational capacities,
- 4. children and adolescents who should complete their preventive vaccinations in line with the SmPC,
- 5. children from risk groups who have particular health indications for immunisation, especially against pneumococci and influenza.

In line with the WHO guidelines, we recommend using vaccinations against:

- 1. pertussis in healthy pregnant women,
- 2. pneumococcal disease and influenza in persons over 60 years old and in risk groups (lung diseases; cardio-vascular diseases; neoplasms; diabetes mellitus; renal failure; immune disorders).

According to the guidelines developed by the WHO and the American Academy of Pediatrics (AAP), we recommend:

- 1. implementing combination vaccines preferentially hexavalent,
- 2. shortening the interval between subsequent doses, which is in line with the minimal value provided in the SmPC,
- 3. performing several vaccinations at one visit in line with the SmPC and the vaccination schedule,
- 4. implementing mandatory vaccinations against influenza in children aged 6 to 59 months as well as in patients up to the age of 18 years from risk groups in the forthcoming season.

The Polish Paediatric Society and the National Consultant state that the further postponement of preventive vaccinations can:

- 1. expose an infant to serious health consequences, especially to a *Bordetella pertussis* infection (whooping cough/pertussis),
- lead to difficulties in the realisation of the vaccination schedule due to the accumulation of missed appointments.

Recommended and implemented precautions allow for the assumption that the risk of being exposed to COVID-19 in children and parents/carers during preventive/vaccination visits will be lower compared to the risk of possible health consequences of delaying immunisa-

tion. Regarding different difficulties and limitations, the Polish Paediatric Society and the National Consultant recommend increasing the supervision carried out by District Sanitary-Epidemiological Stations.

Safety principles followed on the implementation of preventive vaccinations during the COVID-19 pandemic should minimise the risk of SARS-CoV-2 transmission to a child or their parents/carers. The use of personal protection equipment (PPE) by healthcare workers protects both parties by preventing infections in healthcare workers and patients.

The Polish Paediatric Society and the National Consultant recommend the following:

- 1. carrying out remote appointments including:
 - a. interviewing the child, their parents/carers, and other members of the family about risk factors for developing COVID-19,
 - b. initial qualification to vaccination,
- 2. obligatorily measuring the child's and carer's body temperature at the entrance to the outpatient clinic,
- 3. only one healthy parent/carer accompanying the child,
- 4. strictly following the recommended protective measures concerning the use of personal protective equipment, surface disinfection, and spatial isolation within the outpatient clinic (the carer should wear a face mask during the entire stay in the clinic!); sick children and adults cannot stay together at the same time in the same space within the outpatient clinic, which is intended for healthy children [8],
- 5. removing all toys and journals from the waiting room,
- 6. minimising physical contact with the child's medical records.
- 7. providing a room for the vaccinated child to rest after immunisation or to secure an appropriate distance between subsequent patients waiting for visits,
- 8. passing on information about vaccination dates by e-mail/phone,
- planning vaccinations in the first place for the youngest children, i.e. aged below 6 months, who were not previously immunised or their primary vaccinations have been delayed,
- 10.passing on the information about the influenza vaccination for a child and their family in the forthcoming season.

We recommend posting the following information at the entrance to the vaccination outpatient centre: "Regarding the ongoing coronavirus pandemic (COVID-19), our Outpatient Clinic is taking measures to protect the community. All instructions must be followed. During vaccination, the child should be accompanied by only one parent/carer."

We recommend raising awareness among those parents refusing to vaccinate their children about the susceptibility of unvaccinated children to diseases.

D. RECOMMENDATIONS ON PREVENTIVE VISITS

The Polish Paediatric Society and the National Consultant recommend the following:

- prioritising the care over a newborn and infant/child during the first two years of life. Preventive visits should be combined by vaccinations and preceded by completing an epidemiological interview (see Vaccinations). In the case of vaccine exemption or postponement due to non-epidemiological reasons, a visit should be carried out. The overall protection measures should be strictly followed within the outpatient clinic,
- not postponing or unnecessarily delaying visits to paediatric subspecialists and paediatric surgeons,
- 3. performing remote visits as much as possible.

E. RECOMMENDATIONS ON THE CHILD'S MENTAL HEALTH STATUS

The Polish Paediatric Society and the National Consultant recommend the following:

- 1. monitoring the child's safety, especially in environments/groups of high risk,
- 2. monitoring children's safety, especially in families with a history of suspected negligence or domestic violence,
- collaborating with a psychologist to monitor and supervise the patient and their family in any critical situations,
- 4. providing continuous surveillance of children with chronic diseases,
- 5. increasing attention during contact with patients and their families; focus on counteracting the increasing problems associated with social isolation (intervening when needed).

The doctor should not wait for a phone call from the patient's parent/carer. They should initiate calls in order to monitor the child at home.

The paediatrician should take care of the patient's physical and mental health condition.

DISCLOSURE

The authors declare no conflict of interest.

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