

Case study

The first six registered pediatric cases with COVID-19 in Libya.

Abstract

Globally, fewer cases of COVID-19 have been reported in children (age 0-17 years) compared with adults.^{1,2} The number and rate of cases in children have been steadily increasing since March 2020. The true incidence of SARS-CoV-2 infection in children is not known due to lack of widespread testing and the prioritization of testing for adults and those with severe illness. Hospitalization rates in children are significantly lower than hospitalization rates in adults with COVID-19, suggesting that children may have less severe illness from COVID-19 compared to adults.^{5,6}

Evidence suggests that compared to adults, children likely have similar viral loads in their nasopharynx,⁷ similar secondary infections rates, and can spread the virus to others.^{8,9}

Due to community mitigation measures and school closures, transmission of SARS-CoV-2 to and among children may have been reduced during the pandemic in the spring and early summer of 2020. This may explain the low incidence in children compared with adults.

Comparing trends in pediatric infections before and after the return to child care, in-person school, youth sports and other activities may enhance our understanding about infections in children.

Children infected with SARS-CoV-2 may have many of these non-specific symptoms, only have a few (such as only upper respiratory symptoms or only gastrointestinal symptoms), or may be asymptomatic. The most common symptoms in children are cough and/or fever.¹¹⁻¹⁵ A recent systematic review estimated that 16% of children with SARS-CoV-2 infection are asymptomatic,¹⁶ but evidence suggests that as many as half of pediatric infections may be asymptomatic.¹⁷ The signs and symptoms of COVID-19 in children are similar to those of other infections and noninfectious processes, including influenza, streptococcal pharyngitis, and allergic rhinitis. The lack of specificity of signs or

Comment [U1]: COVID-19 writing consistency
Check grammarly (highlight yellow)

Comment [U2]: Title: according to the scope of the journal.

Comment [U3]: The abstract was revised major because the abstract content was repeated from the introduction
The objectives, case studies and conclusions were not stated
Abstract did not include reference sources and the number of words was 200 - 250 words.

Comment [U4]: Abstract without reference

Comment [U5]: It is detected that the % similarity is quite high, so it is recommended to paraphrase the sentence to reduce the similarity (green highlight).

Comment [U6]: Check grammarly

symptoms and the significant proportion of asymptomatic infections make symptom-based screening for identification of SARS-CoV-2 in children particularly challenging.¹⁷

Keywords

Covid-19, children

Comment [U7]: revised keywords: COVID-19, pediatric, children, Libya

1. INTRODUCTION

Globally, fewer cases of COVID-19 have been reported in children (age 0-17 years) compared with adults.^{1,2} The number and rate of cases in children have been steadily increasing since March 2020. The true incidence of SARS-CoV-2 infection in children is not known due to **lack** of widespread testing and the prioritization of testing for adults and those with severe illness. Hospitalization rates in children are significantly lower than hospitalization rates in adults with COVID-19, suggesting that children may have less severe illness from COVID-19 compared to adults.^{5,6}

Comment [U8]: added novelty, the purpose of writing a case study. Revisited case study focus on children or pediatrics?

Evidence suggests that compared to adults, children likely have similar viral loads in their nasopharynx,⁷ similar secondary infections rates, and can spread the virus to others.^{8,9}

Due to community mitigation measures and school closures, **transmission** of SARS-CoV-2 to and among children may have been reduced during the pandemic in the spring and early summer of 2020. This may explain the low incidence in children compared with adults.

Comparing trends in pediatric infections before and after the return to child care, in-person school, youth sports **and** other activities may enhance our understanding **about** infections in children.

Children infected with SARS-CoV-2 may have many of these non-specific symptoms, only have a few (such as only upper respiratory symptoms or only gastrointestinal symptoms), or **may be** asymptomatic. The most common symptoms in children are cough and/or fever.¹¹⁻¹⁵ A recent systematic review estimated that 16% of children with SARS-CoV-2 infection are asymptomatic,¹⁶ but evidence suggests that as many as half of pediatric infections may be asymptomatic.¹⁷ The signs and symptoms of COVID-19 in children are similar to those of other infections and noninfectious processes, including influenza,

streptococcal pharyngitis, and allergic rhinitis. The lack of specificity of signs or symptoms and the significant proportion of asymptomatic infections make symptom-based screening for identification of SARS-CoV-2 in children particularly challenging.¹⁷

2. METHODS

Descriptive case report about the first six registered pediatric cases with **covid-19** in Libya which admitted at Al-Hawari isolation center Benghazi - Libya. From mid of June 2020 to mid of **august** 2020. In the beginning of the pandemic, the policy was **admission** the positive cases regardless **the** medical condition.

Comment [U9]: added the sample population used in the case study

Comment [U10]: COVID-19 writing consistency

3. RESULTS AND DISCUSSION

Age ranged **one** and half **year** to ten years and all cases were asymptomatic. And all of them were contacted with **confirm** adult cases. Normal vital signs and normal general examination. The cases were diagnosed by RT-PCR which **were** positive in all cases. Also covid-19 IgM were positive. Inflammatory markers like ferritin and ESR, D-Dimer were within **normal** range in all cases except procalcitonin which **raised** in 3 cases. CBC and renal function **test** were normal. Serum potassium **were** in **upper border line** in two cases. All six cases were with lower vitamin d (which were below 20 ng/ml). Chest X-ray, Echo and ultrasound abdomen were normal in all cases.

Comment [U11]: the results of clinical diagnoses should be displayed in tables and/or pictures to make it easier for the reader to understand.

Comment [U12]: there is no discussion, it is recommended to add a discussion about the pathogenesis of COVID-19 in children or pediatrics, epidemiological data for COVID-19 in Libya supported by appropriate reference citations. This is to increase the scientific value.

4. CONCLUSION

All the **confirm** cases get the infection of **Covid-19** from their families and all of them were **a symptomatic**.

That **mean** the severity of **Covid-19** in pediatric is lower than the adult.

Comment [U13]: Conclusion: revised because it has not answered the purpose of writing a case study.

5. REFERENCES

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Comment [U14]: added citations of references in manuscripts that have not been listed (numbers 10 - 17).

Comment [U15]: added date of citation..

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