EPIDEMIOLOGY AND CLINICAL CHARACTERISTICS OF LABORATORY-CONFIRMED CASES OF COVID-19 AGED ≤18 YEARS

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CONTENTS

Background

In December 2019, a cluster of pneumonia cases of unknown aetiology was reported in Wuhan, Hubei Province, China. The cause of the outbreak has since been confirmed as severe acute respiratory coronavirus-2 (SARS-CoV-2) and the disease named coronavirus disease 2019 (COVID-19)[1]. Cases have since spread worldwide, with 15 581 009 million individuals infected and 635 173 deaths reported to World Health Organization as of 25 July 2020.[2] The first case of COVID-19 in South Africa was reported on 5 March 2020 (week 10) in KwaZulu-Natal Province.[3] By 25 July 2020, the country had reported 445 342 cases including 6769 deaths with majority of cases (160 169/445 381, 36.0%) reported in Gauteng Province.[3]

There are limited data from South Africa on the epidemiology and clinical presentation of COVID-19 in children. Data from other countries, although limited, suggest that the clinical presentation of COVID-19 may differ in children and that they have a lower risk of severe disease as compared to adults[4-7]. With recent reports of cases of multisystem inflammatory syndrome in children,[8, 9] it is important to describe the presentation of COVID-19 in children. Individuals aged ≤18 years constitute just over one third (20 633 557; 35.1%) of the population of South Africa. Different control strategies were implemented at different time points including school closures, schools were closed for all learners on the 18 March (week 12), reopened on the 1st June (week 23) for grade 7 and grade 12 learners and some schools reopened on 6 July (week 27) for grade R, 6 and 11. Government schools closed again on the 27 July (week 31) to date for all learners. Describing the epidemiology of COVID-19 in children in South Africa is important to assist policy-makers in making informed decisions about prevention strategies and risk groups for prioritisation. This is the second report describing the epidemiological characteristic of individuals aged ≤18 years with laboratory-confirmed COVID-19 who were notified through the national notification system in South Africa, and the individuals aged ≤ 18 years hospitalised for COVID-19- related illness at sentinel hospitals in South Africa.

Methods

In the first part of the report, we present data from a national laboratory-based surveillance system[3]. Data on SARS-CoV-2 real-time reverse-transcription polymerase chain reaction (rRT-PCR) test results from public and private laboratories were submitted to the National Institute for Communicable Diseases (NICD). Limited demographic and epidemiological data was collected at the time of collecting a specimen for PCR testing.

The second part of the report presents data from the DATCOV platform, an electronic data collection system used by sentinel hospitals to report data on individuals admitted with laboratory-confirmed COVID-19 disease.[10] The DATCOV system collects demographic and clinical information on admitted COVID-19 cases at admission, during admission and at discharge from sentinel private and public hospitals across all nine provinces in the country. As of 25 July 2020, there were 321 facilities (98 public sector and 223 private sector) submitting data to DATCOV.

A laboratory-confirmed case of COVID-19 was defined as any person who tested positive for SARS-CoV-2 by a rRT-PCR assay on a respiratory sample obtained from a nasopharyngeal and/or oropharyngeal swab. We included data from 3 March through to 25 July 2020.

Data analysis

Descriptive statistics were used to describe the characteristics of individuals aged ≤18 years with laboratory-confirmed COVID-19 in South Africa from the two datasets separately. We used 2019 mid-year population estimates from Statistics South Africa to calculate the incidence risk (cumulative or weekly incidence), expressed as cases per 100 000 persons.

Results

National laboratory-based surveillance

As of 25 July 2020, a total of 445 432 laboratory-confirmed cases of COVID-19 were notified through the national laboratory-based surveillance in South Africa, among whom 33 065 (7.4%) were known to be aged ≤18 years. Among individuals aged ≤18 years, 54% (17 670/32 552) were female and the majority (12 371/33 065; 37.4%) were older adolescents aged 15-18 years. The median age of cases was 13 years (interquartile range [IQR] 7-16 years) (Table 1). Of the 33 065 cases aged ≤18 years, 11% (n=3670) were reported in the past week (week ending 25 July 2020). The gender distribution and median age of cases reported in the past week was similar to that of total cases reported to date: 54% (1911/3 626) were female and the median age was 13 years (IQR 8-16 years).

Cases were reported from all nine provinces. The majority (85.4%, 28 247/33 061) of cases were reported from four provinces: Gauteng Province (33.2%, 10 969/33 061), followed by the Eastern Cape (21.1%, 6 973/33 061), KwaZulu-Natal (17.5%, 5 769/ 33 061) and Western Cape (13.7%, 4 536/33 061) provinces (Table 1). The reported number of paediatric cases increased since the beginning of the epidemic, with the highest weekly number of cases (18%, 6 328/33054) reported in week 28 (week ending 11 July 2020). In the past week (week ending 25 July), the highest number of cases was reported from Gauteng (31.5%, 1157/ 3670), followed by KwaZulu-Natal (22.5% 828/3670) and Eastern Cape (12.0%, 439/3 670) provinces (Figure 1).

Cumulative incidence risk by province: The cumulative incidence risk varied by province over time. In the first 8 weeks of the outbreak, the Western Cape Province reported the highest cumulative incidence risk; this was maintained until week 27. From week 28 onwards, the Eastern Cape Province reported the highest cumulative incidence risk followed by Gauteng Province. In the most recent week (week 30, ending 25 July 2020), the Eastern Cape Province (253.5 cases per 100 000 persons) reported the highest cumulative incidence risk, followed by Gauteng (217.6 cases per 100 000 persons) and Western Cape (213 cases per 100 000) provinces (Figure 2) .

Weekly incidence risk trends by province: In week 26 (week ending 27 June 2020), Eastern Cape and Gauteng provinces had steep increases in weekly incidence risks which peaked at week 27 (week ending 4 July) for Eastern Cape (49.1 cases per 100 000 persons) and week 28 (week ending 11 July) for Gauteng (49.7 cases per 100 000 pesons) followed by a downward trend in both provinces. In week 30, the Free State Province reported the highest weekly incidence risk (35.0 cases per 100 000 persons) followed by Gauteng Province (25.6 cases per 100 000 persons), whereas the Western Cape Province reported the lowest incidence risk (1.7 cases per 100 000 persons). All the provinces showed a decrease in week 30 incidence risk compared to the previous week, except for Mpumalanga, which showed

an increase of 2.3 cases per 100 000 persons since week 29 (Figure 3). The changes in weekly incidence risks may reflect a decrease in transmission. However, this could also be as a result of change in testing strategies as more priority is given to testing severe cases who require hospitalisation.

Cumulative incidence risk by age and sex: The cumulative incidence risk of laboratory-confirmed cases aged ≤18 years was 160.4 cases per 100 000 persons, with the highest cumulative incidence risk reported among individuals aged 15-18 years (331.6 cases per 100 000 persons) and the lowest cumulative incidence risk reported among cases aged 0-4 years (89.6 cases per 100 1000 persons) (Figure 4). The cumulative incidence risk was higher among females (172.9 cases per 100 000 persons) than in males (142.6 cases per 100 000). For both females and males, the incidence risk increased with increasing age, peaking among individuals aged ≥15 years; however, this was higher for females (391.6 cases per 100 000 persons) versus males (261.4 cases per 100 000 persons) (Figure 5 and table 2).

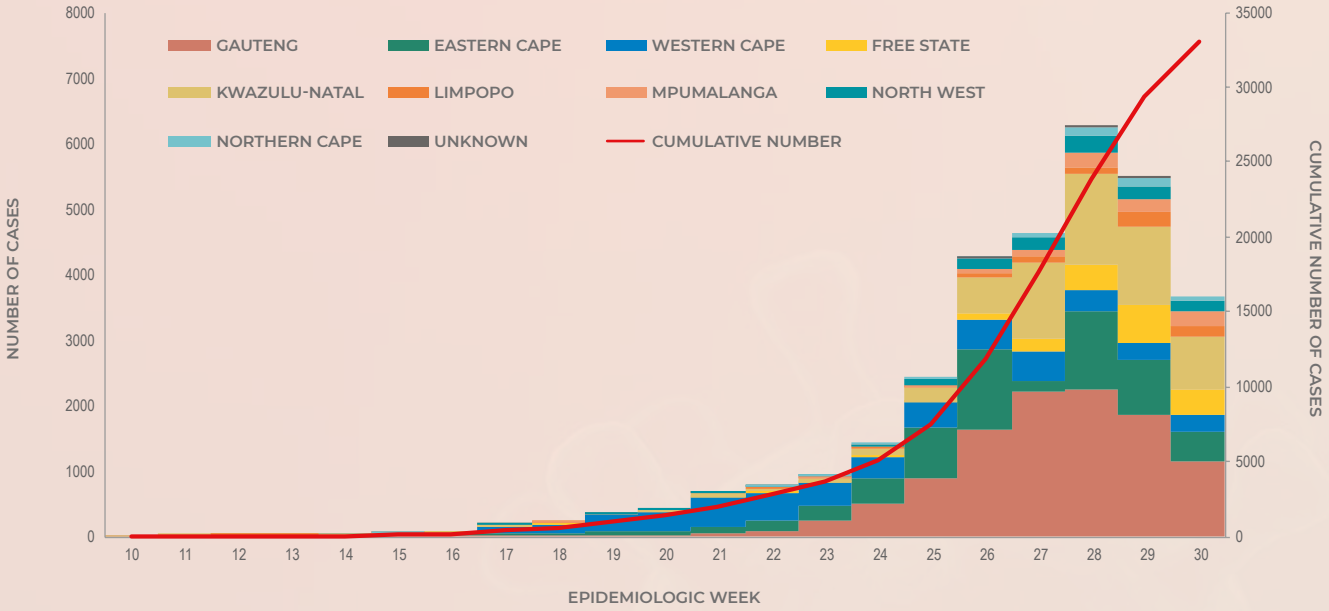

Figure 1. Number of laboratory–confirmed COVID-19 cases aged ≤18 years by province and epidemiological week, South Africa, 3 March 2020-25 July 2020 (n=33 054, 11 missing sample collection date)

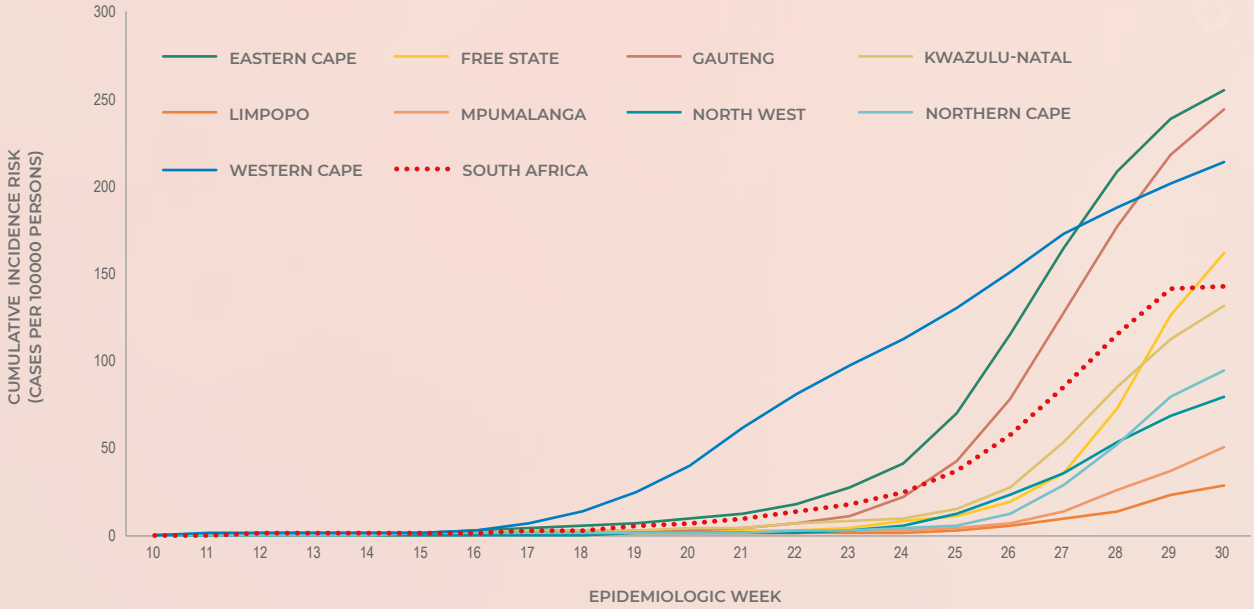

Figure 2. Cumulative incidence risk of PCR-confirmed COVID-19 cases aged ≤18 years by province and epidemiologic week, South Africa, 3 March-25 July 2020 (n=33 054, 11 missing sample collection date)

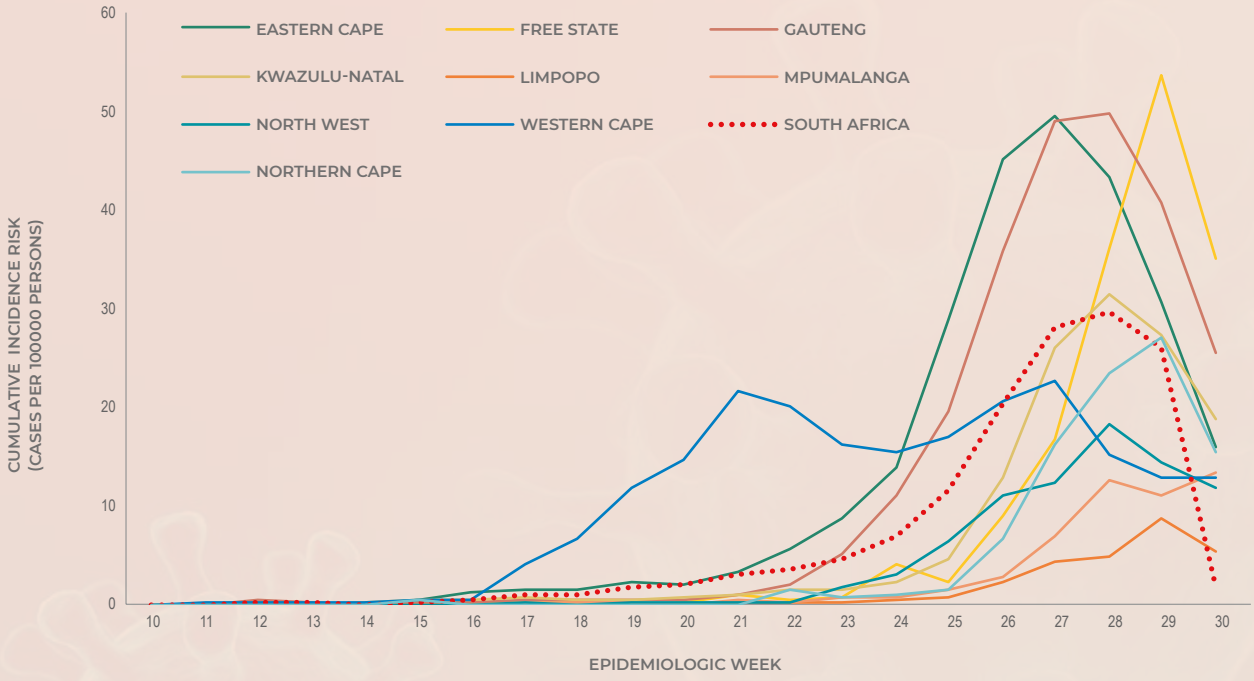

Figure 3. Weekly incidence risk of PCR-confirmed cases of COVID-19 cases aged ≤18 years by province and epidemiologic week, South Africa, 3 March-25 July 2020 (n=33 054, 11 missing sample collection date)

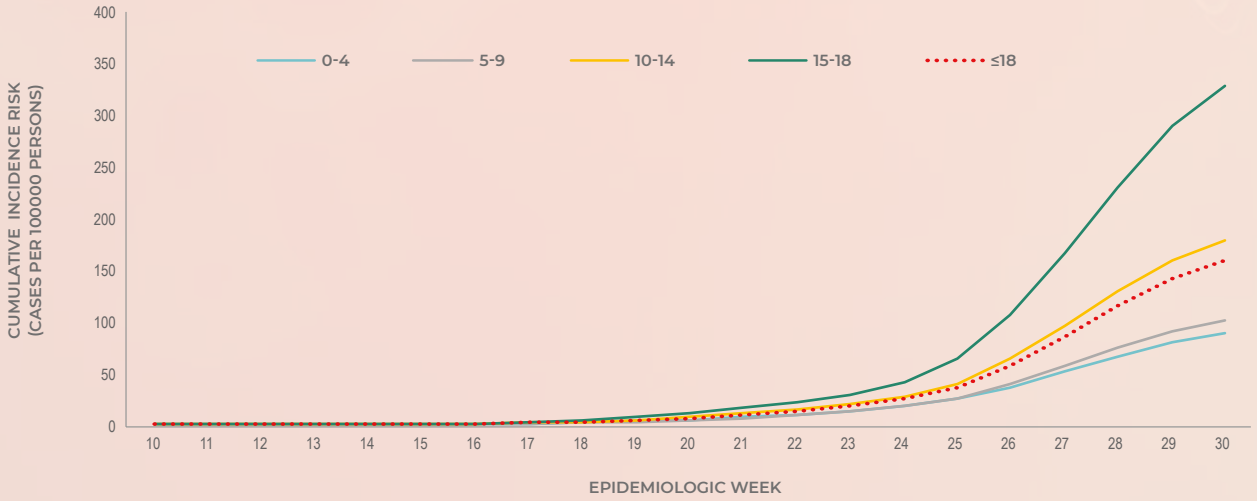

Figure 4. Cumulative risk of laboratory-confirmed COVID-19 cases aged ≤18 years by age group, South Africa, 3 March-25 July 2020 (n=33 054, 11 missing sample collection date)

Table 1. Number and characteristics of laboratory-confirmed COVID-19 cases aged ≤18 years, South Africa, 3 March-25 July 2020, n=33 065

Characteristics	Cumulative number of cases (n=33 065)	New cases reported in week 30 (n=3 670)
Age (years), median (interquartile range)	13 (7-16)	13 (8-16)
Age group (years), n (%)		
0-4	5 138 (15.5)	546 (14.8)
5-9	5 797 (17.5)	598 (16.3)
10-14	9 759 (29.5)	115 (27.7) 0
15-18	12 371 (37.4)	1 511 (41.2)
Sex, n (%)		
Male	14 852 (45.6)	1 715 (47.3)
Female	17 670 (54.3)	1 911 (52.7)
Province, n (%)		
Eastern Cape	6 973 (21.1)	439 (12.0)
Free State	1 677 (5.1)	367 (10.0)
Gauteng	10 969 (33.2)	1 157 (32.5)
KwaZulu-Natal	5 769 (17.5)	828 (22.6)
Limpopo	678 (2.1)	133 (3.6)
Mpumalanga	862 (2.6)	228 (6.2)
North West	1 168 (3.5)	173 (4.7)
Northern Cape	429 (1.0)	70 (1.9)
Western Cape	4 281 (16.1)	275 (7.5)
Not allocated	3 (0.01)	0

Table 2. Number and cumulative incidence risk of laboratory confirmed cases of COVID-19 cases aged ≤18 years by age group, South Africa 3 March 2020-25 July 2020 (33 065)

Age group in years	All cases, n (%)	Population mid-2019*, n	Incidence risk in individuals ≤18-years-old (cases per 100 000 persons)
0-4	5 138 (15.5)	5 733 946	89.6 (87.2-92.1)
5-9	5 797 (17.5)	5 73 7439	101.0 (98.5.0-103.7)
10-14	9 759 (29.5)	5 427 902	179.8 (176.3-183.4)
15-18	12 371 (37.4)	3 734 270	331.3 (325.5.0-337.2)
0-18	**33 065 (100.0)**	**20 633 557**	**160.2 (158.5-162.0)**

* Statistics South Africa 2019 mid-year population estimates

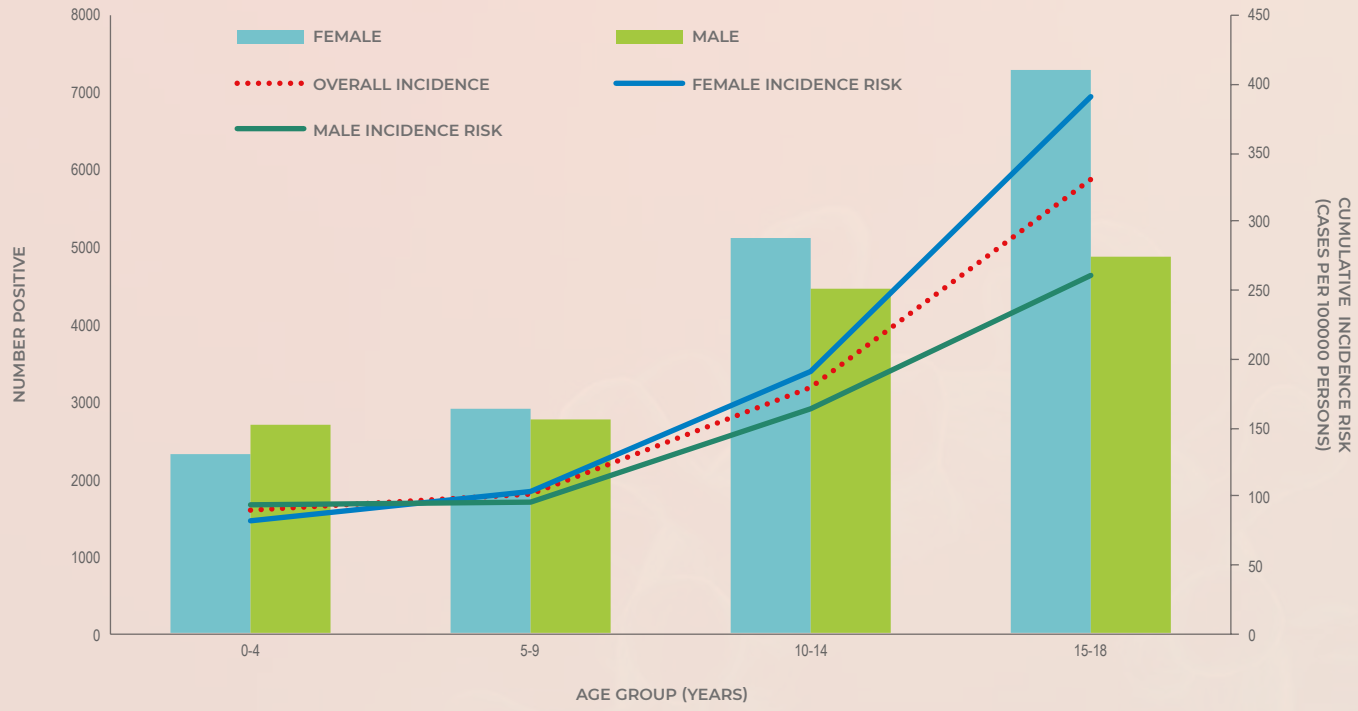

Figure 5. Number and cumulative incidence risk of laboratory confirmed COVID-19 cases aged ≤18 years by age group and sex, South Africa, 3 March 2020-25 July 2020 (n=32 522, 543 missing sex)

DATCOV sentinel hospital surveillance

As of 25 July 2020, data on 33 318 COVID-19-associated admissions had been captured by DATCOV. Of these admissions, 1067 (3.2%) were among individuals aged ≤18 years. The proportions of admissions aged ≤18 years varied by province from 2.4% in Gauteng to 5.6% in Northern Cape. The first admissions among children with COVID-19 occurred during week 9 (Figure 6). The majority of paediatric admissions were in four provinces: Western Cape (43.2%), Gauteng (20.2%), KwaZulu-Natal (14.5%) and Eastern Cape (9.0%) provinces, while the remaining five provinces accounted for the remaining 13% of admissions (ranging from 1.5% to 4.8%).

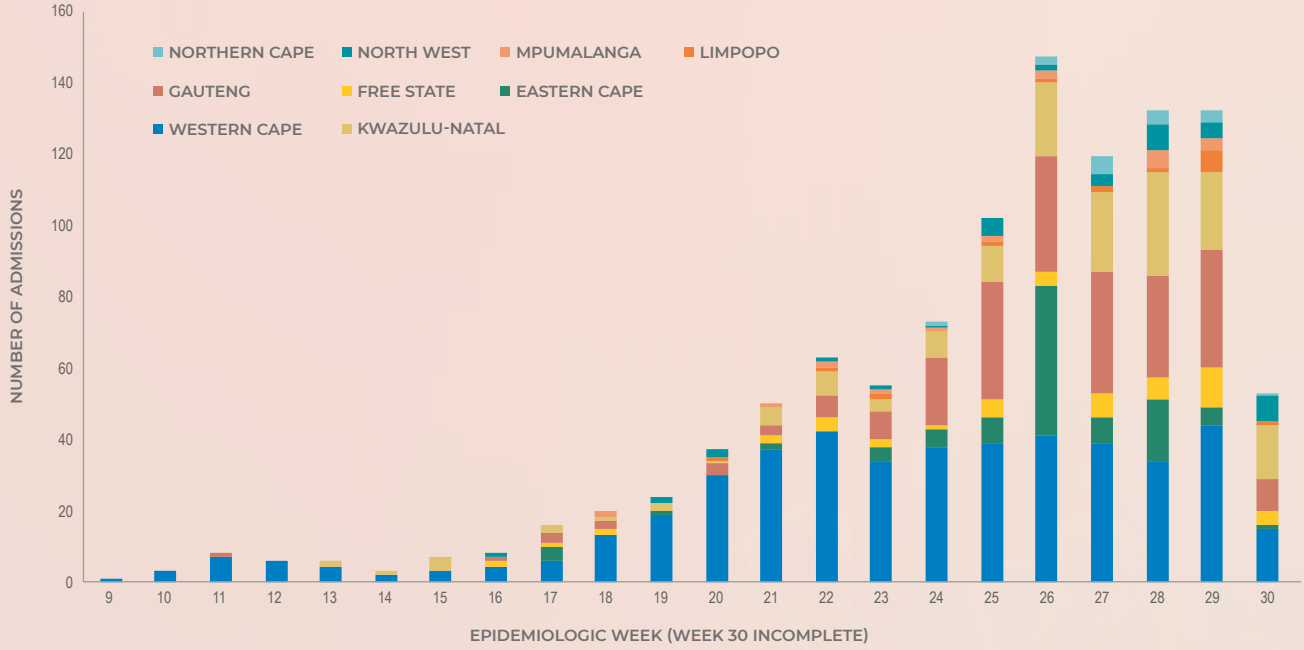

Figure 6. Number of admissions among laboratory-confirmed cases of COVID-19 aged ≤18 years by epidemiologic week and province, South Africa, DATCOV sentinel hospitals, 25 July 2020 (n=1067)

Generally, there were notable increases in the numbers of paediatric admissions from weeks 25-29 compared to prior weeks in Eastern Cape, Gauteng and KwaZulu-Natal provinces (Figure 6). The number of admissions among children 15 years or older increased sharply from 22 in week 25 to about 64 in week 26, coming down and then fluctuating between 35 – 45 until week 29 (Figure 7). Among children aged 10- 14 years, the number of admissions increased slowly from 8 in week 24 reaching a much lower peak of 29 (compared to ≥15 year olds) in week 28. Admissions in children aged 5- 9 years increased slightly from onset of the epidemic to 17 in week 25 and have fluctuated at these levels until week 30. Among the youngest children, there were gradual increases in admissions from 15 in week 19 then plateauing at around 50 during weeks 25 to 29. (Figure 7).

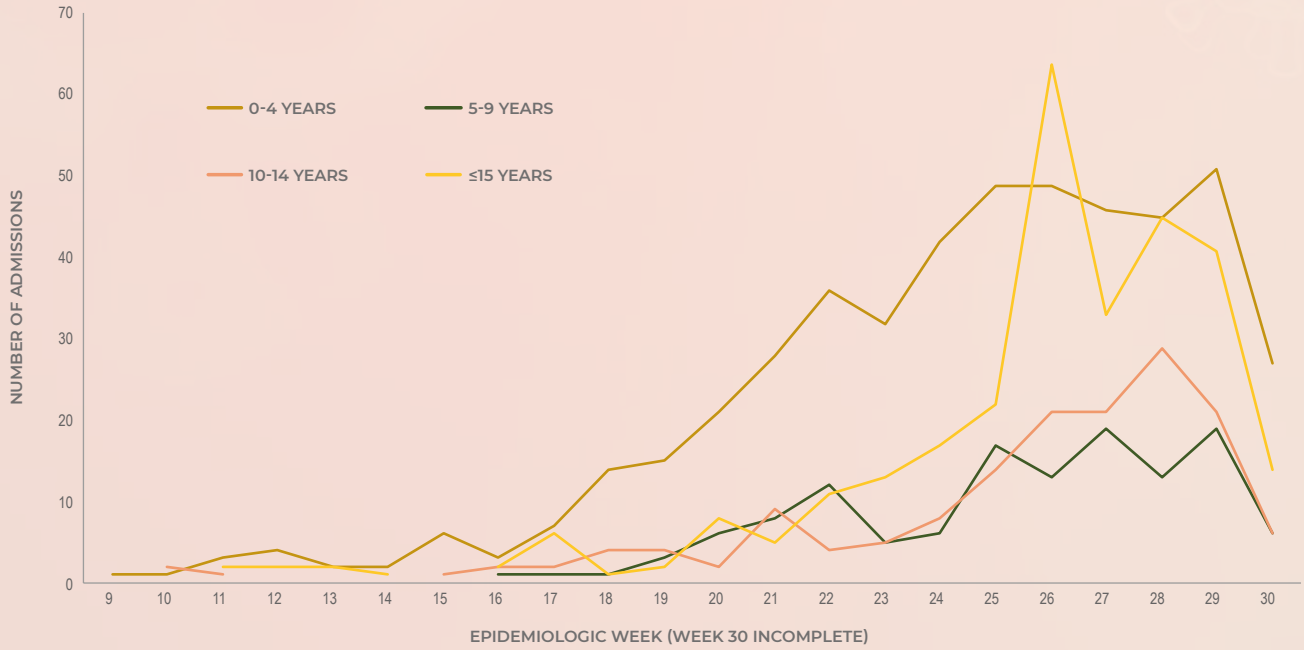

Figure 7. Number of admissions among laboratory-confirmed cases of COVID-19 aged ≤18 years by epidemiologic week and age, South Africa, DATCOV, 3 March-25 July 2020 (N=1067)

Of the 1067 admitted children and adolescents included in the analysis, the median age was 7.0 years (IQR 1 -15.6 years) with 273 (25.6%) aged <1 year while 524 (49.1%) were male. Figure 8 shows the distribution of the admissions by age and sex, with highest number of cases among females aged 15-18 years.

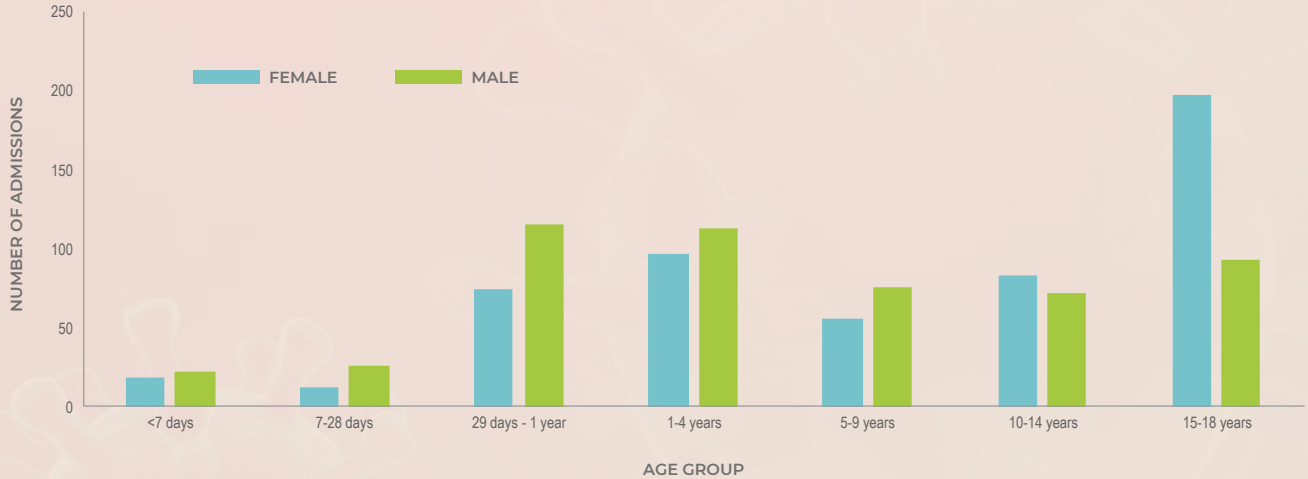

Figure 8. Number of laboratory-confirmed COVID-19 admissions aged ≤18 years by age group and sex in South Africa, DATCOV, 3 March-25 July 2020 (n=1067)

There were slightly more males than females in all age groups except in the 10-14 year old age group where there were slightly more females than males and in the 15-18 year old age group where there was largely female preponderance. Almost half of the children (48.2%) were admitted to public hospitals. Overall, 148 (13.9%) had one or more underlying conditions while these data were missing for 354 (33.2%) individuals. Among the 148 who had one or more underlying conditions reported, 25 (16.9%) had ≥2 underlying conditions. Respiratory conditions were the most frequently reported underlying conditions followed by HIV infection and diabetes mellitus (Figure 9). Table 3 shows the demographic and clinical characteristics of children admitted with COVID-19 stratified by age category.

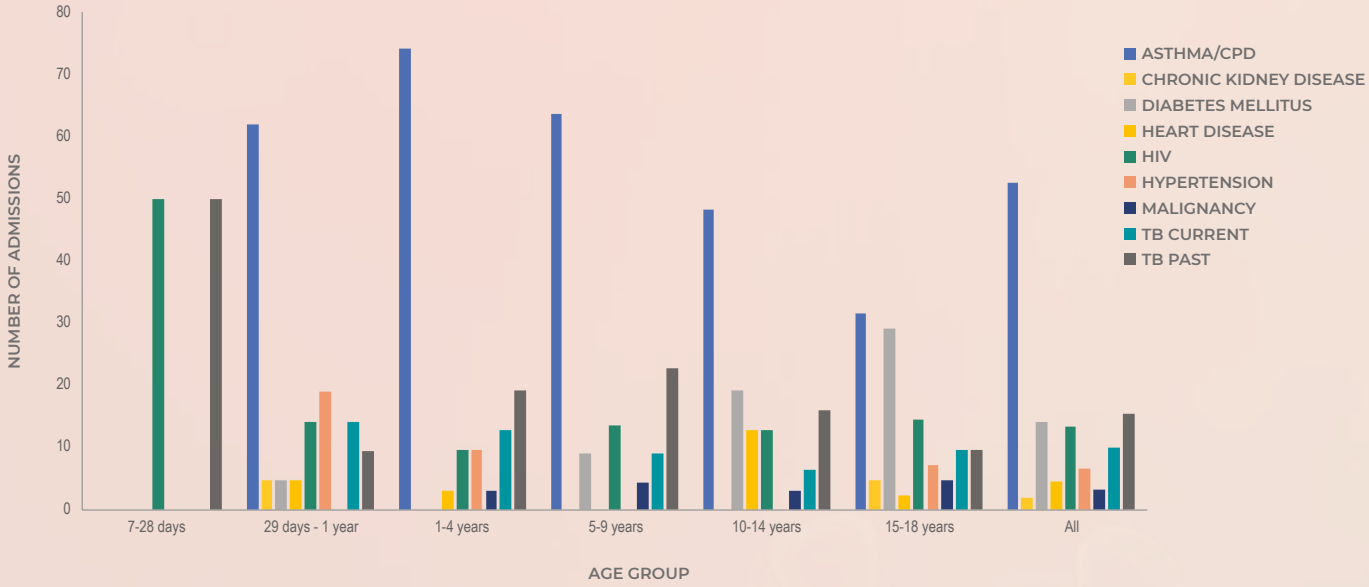

Figure 9. Distribution of underlying conditions among children and adolescents with ≥1 underlying conditions by age group in South Africa, DATCOV, 3 March- 25 July 2020 (n=148)

Outcomes of children admitted with COVID-19

Of the 1067 children admitted with COVID-19, 79 (7.4%) were admitted into an intensive care unit (ICU) and 23 (2.2%) were ventilated at some point during their admission. At the time of this analysis, 890 (83.4%) had been discharged, 141 (13.2%) were still admitted, eight (0.6%) had been transferred to other facilities and 26 (2.4%) had died during admission. The overall median length of hospital stay was 3 days (IQR, 2- 6 days) and was 10 days (IQR, 2- 27 days) for those who died. Table 3 includes descriptions of these outcomes by age categories. Among the children who died, the median age was 9.1 years (IQR, 66 days - 16 years) with 10 (38.5%) under the age of 5 years. Of the children who died, 9 (34.6%) had known underlying conditions, 6 (23.1%) did not have any known underlying conditions while this information was missing for 11 (42.3%). Table 4 describes characteristics of children who died. While respiratory conditions were the most common underlying conditions, they were not associated with any deaths.

Table 3. Characteristics of COVID-19 admissions among children and adolescents aged ≤18 years in South Africa, DATCOV,3 March-25 July 2020 (n=1067)

Variable	Overall (in years)	<7 days (n=42)	7-28 days (n=40)	29 days-<1 yr (n=191)	1-4 years (n=211)	5-9 years (n=134)	10-14 years (n=157)	15-18 years (n=292)
Age (median, IQR)	7.0 (1.0-15.6 yrs)	0 (0-2 days)	16.0 (12-22 days)	108 (56-210 days)	2.1 (1.4-3.1 yrs)	7.7 (6.6-8.8 yrs)	12.9 (11.5-14.0 yrs)	17.6 (16.7-18.1 yrs)
Male (n, %)	524 (49.1)	23 (64.8)	27 (67.5)	116 (60.7)	114 (54.0)	77 (57.5)	73 (46.5)	94 (2.2)
Province								
Western Cape	461 (43.2)	14 (33.3)	25 (62.5)	121 (63.4)	111 (52.6)	59 (44.0)	50 (31.9)	81 (27.7)
Eastern Cape	96 (9.0)	1 (2.4)	0	7 (3.7)	8 (3.8)	8 (6.0)	12 (7.6)	60 (20.6)
Gauteng	216 (20.2)	10 (23.8)	7 (17.5)	34 (17.8)	41 (19.4)	31 (23.1)	39 (24.8)	52 (17.8)
KwaZulu-Natal	155 (15.4)	8 (18.2)	5 (12.5)	22 (11.5)	25 (11.9)	14 (10.5)	34 (21.7)	45 (15.4)
Others	139 (13.0)	5 (11.9)	3 (7.5)	7 (3.7)	26 (12.3)	22 (16.4)	22 (14.0)	54 (18.5)
Admitted to a public hospital, (n, %)	514 (48.2)	11 (26.2)	30 (75.0)	119 (62.3)	94 (44.6)	52 (38.8)	62 (39.5)	146 (50.0)
Underlying conditions*, (n, %)								
None known	462 (51.6)	18 (54.5)	6 (16.7)	53 (33.8)	93 (51.1)	68 (58.6)	70 (52.6)	154 (64.7)
Yes	125 (14.0)	0 (0.0)	2 (5.6)	16 (10.2)	28 (15.4)	19 (16.4)	27 (20.3)	33 (13.9)
Missing	308 (34.4)	15 (45.5)	28 (77.8)	88 (56.1)	61 (33.5)	29 (25.0)	36 (27.1)	51 (21.4)
Length of stay (median, IQR)**	3 (2-6)	10 (2-36)	5 (3-11)	3 (2-7)	2 (1-4)	2 (1-4)	3 (2-8)	5 (2-7)
Oxygen support	77 (7.2)	5 (11.9)	3 (7.5)	18 (9.4)	9 (4.3)	5 (3.7)	18 (11.5)	19 (6.5)
ICU admission	79 (7.4)	12 (28.6)	7 (17.5)	15 (7.9)	13 (6.2)	6 (4.5)	11 (7.0)	15 (5.1)
Ventilation	23 (2.2)	8 (19.1)	1 (2.5)	5 (2.6)	4 (1.9)	1 (0.8)	3 (1.9)	1 (0.3)
Died***	26 (2.4)	1 (2.4)	3 (7.5)	6 (3.1)	2 (1.0)	1 (0.8)	3 (1.9)	10 (3.4)
Discharged alive	890 (83.4)	24 (64.3)	27 (67.5)	157 (82.2)	186 (88.2)	117 (87.3)	136 (86.6)	240 (82.2)
Transferred to another hospital	8 (0.8)	0	0	2 (1.1)	1 (0.5)	0	1 (0.6)	4 (1.4)
Still admitted	141 (13.2)	12 (28.6)	10 (25.0)	26 (13.6)	22 (10.4)	16 (11.9)	17 (10.8)	38 (13.0)

Yrs= years; IQR= interquartile range; *Individual can have more than one comorbidity;** among those who died, transferred or discharged *** excludes 2 deaths which was deemed unrelated to COVID-19; ICU = intensive care unit;

Table 4. Characteristics of individuals aged ≤ 18 years who died in hospital with COVID-19, South Africa, DATCOV sentinel hospitals, 3 March-25 July 2020 (n=26)

Characteristic	n (%)
Age (median, IQR)	9.1 years (66 days-16 years)
Male	17 (65.4)
Province	
Western Cape	12 (14.2)
Eastern Cape	2 (7.7)
Gauteng	9 (34.6)
KwaZulu-Natal	1 (3.9)
Others	2 (7.7)
Number of underlying conditions	
0	6 (23.1)
1-2	6 (23.1)
>2	3 (11.5)
Unknown	11 (42.3)
Underlying condition*	
Diabetes mellitus	3/15 (20.0)
Hypertension	2/15 (13.3)
Malignancy	2/15 (13.3)
Heart disease	2/15 (13.3)
Chronic kidney disease	1/15 (6.7)
Tuberculosis past	1/15 (6.7)
Tuberculosis current	1/15 (6.7)
Asthma/ chronic pulmonary disease	0/15 (0)
HIV infection	0/15 (0)

IQR= interquartile range; *An individual can have more than one comorbidity

Discussion

This report presents data on individuals aged ≤18 years with COVID-19, for the period 3 March - 25 July 2020, from two surveillance systems monitoring the COVID-19 pandemic in South Africa. From both programmes, children comprised <8% of reported cases (7.4%) or admissions (3.2%) in South Africa, despite constituting approximately one third of the South African population. From the laboratory-based surveillance, the majority of cases were in the older adolescent age group (15-18 years), which also had the highest incidence risk. These data suggests that, similar to data from other countries, the burden of COVID-19 disease is lower in young children compared to older children and adults (incidence risk ranged between 4.95 cases per 100 000 persons in individuals aged 20-24 years and 1602.1 cases per 100 000 persons in cases aged ≥ 80 years in South Africa)[4, 5, 7]. At the beginning of the outbreak, the Western Cape Province reported the highest numbers of paediatric cases and incidence risk. However, this changed from week 26, with Gauteng and Eastern Cape provinces then reporting more cases than Western Cape in more recent weeks. To date, the majority of reported paediatric cases were from the Gauteng Province – this reflects the current epidemiology in South Africa, with Gauteng reporting more than a 3rd of total cases in the country[3]. The same four provinces (Gauteng, Eastern Cape, Western Cape and KwaZulu-Natal provinces) contributed the majority of cases in both children and adolescents and individuals older than 18 years in South Africa. Similar to data among individuals older than 18 years in South Africa, a higher proportion of paediatric cases and incidence risk occurred among females which may reflect health-seeking practices or differential exposure to COVID-19 within community settings. All provinces reported a decline in paediatric incidence risk in week 30, except for Mpumalanga province. This may reflect decrease in transmission or change/difference in testing practices in the different provinces.

The DATCOV sentinel hospital surveillance system presented demographic and clinical characteristics of children admitted with COVID-19 at sentinel hospital sites. The majority of admissions were in four provinces, Western Cape, Gauteng, KwaZulu-Natal and Eastern Cape (9.0%) provinces. Among the COVID-19 admissions in children, the median age at admission was lower than that among all diagnosed cases ≤18 years, which may suggest that severe disease may be more common among younger children or that clinicians are more likely to admit younger children as a precaution. In addition, some of the younger cases were new-borns who may have been admitted for birth-related complications or precautionary reasons rather than COVID-19-related illness. Of the children aged ≤18 years who were admitted, the percentage of case patients who required ICU admission and ventilation remained the same since the last report: 7% were admitted into ICU and 2% ventilated. Whereas, among individuals aged >18 years 15.4% were admitted into ICU and 6.7% were ventilated suggesting that children with less severe disease compared to adults were admitted to hospital. However, the case-fatality ratio (CFR) increased from 1% to 2.4% since the last report. The reported CFR was much lower than that reported for individuals >18 years (this ranged between 5.2% and 45.7% in the different adult age groups)[10]; this suggests that the children may have been admitted with milder forms of disease. Other countries have also reported small numbers of deaths among children with COVID-19 [6, 11]. Both surveillance systems showed a sharp increase in number of cases reported and cases hospitalised in Eastern Cape and Gauteng provinces from week 26. These increases paralleled the increases seen in total cases, including older age groups, reported from these provinces[12]. This may reflect an increase in community transmission and may also be related to the outbreaks in schools following opening of schools. In our analysis, the children who died had other severe comorbidities and the role of COVID-19 in disease progression was unclear. This highlights the need for better determination of causes of death so that final death classification can be possible.

Limitations

The laboratory based-surveillance system detects large numbers of cases, but important epidemiological data including clinical presentation, underlying conditions and outcome were not collected systematically, especially as the numbers of cases in the country increased. It was not possible to describe these factors and to assess factors associated with severe disease. However, there are other surveillance platforms, such as syndromic surveillance for severe respiratory illness and influenza-like illness in South Africa which are better placed to answer these questions in the future as case numbers increase[13]. Trends in numbers of new cases by province and age group may be affected by changes in testing practice and delays in the testing of specimens. The numbers reported may change as data becomes available.

For the DATCOV hospital surveillance, data on indications for admission were not provided and it was not possible to determine if children were admitted because of COVID-19 disease or if SARS-CoV-2 infection was a coincidental finding at admission. Also it was not possible to determine if some children were admitted for isolation purposes only. The DATCOV platform is sentinel site based so does not include COVID-19 admissions at all hospitals in the country. Because DATCOV surveillance is hospital-based, cases and deaths occurring outside hospitals would be missed and therefore reported cases and mortality will be an underestimate even for areas which fall under the catchment of a participating sentinel hospital.

Both surveillance systems included only SARS-CoV-2-confirmed or tested COVID-19 cases or admissions and therefore, asymptomatic cases would have been missed as well as individuals who were not tested. Testing approaches in South Africa have changed as the epidemic progressed, potentially biasing characteristics of detected cases.[14]

Conclusions

COVID-19 is relatively uncommon among South African children including among the school-going children aged 5 to 18 years and when it occurs, the illness may be milder than in adults. However, a small proportion of cases do require hospital admission, although mortality is rare. These data are consistent with data from other countries.[4, 5] which report milder presentations and lower mortality in children. The implementation of non-pharmaceutical interventions such as using masks, physical distancing and hand washing or sanitising within schools and in communities at large need to be strengthened to prevent children acquiring SARS-CoV-2 infections. Data on outcomes for cases who were not hospitalised was missing highlighting the gap in these two surveillance platforms. Surveillance or reporting in schools may provide additional valuable information.

Acknowledgements

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