
LETTERS TO THE EDITOR**Keeping in-school adolescents safe from COVID-19 sequelae to the suspension of school lockdown restriction**Olayinka Stephen Ilesanmi^{1,2}, Olayemi Olaniyi Olaleye², Aanuoluwapo Adeyimika Afolabi¹¹Department of Community Medicine, College of Medicine, University of Ibadan, Oyo State, Nigeria²Department of Community Medicine, University College Hospital, Ibadan, Oyo State, Nigeria**Corresponding author:**

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Abstract

Rapid transmission of the Coronavirus disease (COVID-19) and resulting fatalities necessitated the closure of educational institutions in March, 2020 globally, and affected nearly 1.6 billion learners globally. However, presently lockdown measures have been lifted in many countries, and resumption of physical learning in schools has commenced. At this notable period, it is pertinent to ensure the safety of schoolchildren and teachers from COVID-19 while preventing the risk of further transmission of COVID-19 in school settings. Therefore, we recommend adherence to the reduction of contact between in-school adolescents during school hours. Provision of face masks and handwashing equipment such as soap, clean water, bucket(s), and disposable tissue papers positioned at different points should be ensured in schools, with the modalities for such practice exemplified on information, education, and communication materials. Also, maintaining a minimal physical distance of 1m, use of face masks, regular hand washing and disinfection of classrooms, toilet facilities, and surfaces is important. In addition, adequate ventilation in classrooms through the opening of windows or the use of air purifiers must be ensured among teachers and other school personnel would contribute effectively to the safety of in-school adolescents while schools have reopened amid the COVID-19 pandemic.

Keywords: Coronavirus, COVID-19, COVID-19 school lockdown, School lockdown, adolescents, in-school adolescents

The recent outbreak of the novel Coronavirus disease (COVID-19) has negatively impacted health and global development [1]. Rapid transmission of COVID-19 has occurred after the index case was reported in Wuhan city, China in December, 2019. As of 12th November, 2020, 52,143,259 cases of COVID-19 and 1,264,077 deaths have been recorded [2]. To control and contain COVID-19, many public health measures were implemented. These included border control measures, social distancing, regular hand hygiene, and use of face masks which were advocated at the early period of the disease outbreak [3]. Globally, school lockdown measures were implemented in March, 2020, and disrupted the education of nearly 1.6 billion learners in more than 190 countries for at least 5 months [4]. However, presently lockdown measures have been lifted, across many countries and resumption of physical learning in schools has commenced. Available evidence from the United States after school reopening reported that of the total tests conducted in 10 parts of the United States, children made up 5.0-17.1%, and 3.7-16.2% tested positive [5]. Also, a 11.3% increase in the number of COVID-19 cases among children was

reported, and 0.00-0.18% of all COVID-19 deaths as of 5th November, 2020 [5]. Following this trend in the increasing number of cases and resulting mortality, we aimed to assess the strategies to ensure the safety of in-school adolescents from COVID-19 after school lockdown restrictions have been lifted.

The COVID-19 virus (SARS-CoV-2) is transmissible across all sub-groups in the population; however, children and adolescents present with fewer symptoms and reduced severity compared to others [6]. Taking into account global and regional infection and case fatality rates of COVID-19, the best option would be to extend the COVID-19 lockdown period. However, such prolonged measures would further impede opportunities for physical learning. In addition, the opportunities for health-based interventions such as school meal programs, which are obtainable only in school-based settings would be forgone, thus delimiting the overall health condition of children and adolescents [4,7]. Therefore, the reopening of educational institutions is germane to overcoming these limitations. However, it is important that evidence-based strategies are implemented to avert the risk of COVID-19

transmission among schoolchildren to forestall the greater risk of rapid onward transmission to other members of the population.

The reopening of schools should be accompanied by basic precautionary public health measures. This would include the practice of social distancing to avert the risk of overcrowding, a known risk factor for COVID-19 transmission. Strategies for adequate provision of masks such as mask distribution from private individuals, community-based organizations are needed during school reopening. Also, handwashing equipment such as soap, clean water, bucket(s), and disposable tissue papers positioned at different points are needed [4]. For situations where the aforementioned are not available, alcohol-based hand rubs should be used to keep the hands clean. Information, Education, and Communication (IEC) materials such as bills and posters should be provided in schools to teach in-school adolescents and their teachers the standard procedure for distancing, mask use, and hand hygiene [8-9]. In addition, protocol officers should be stationed at each hand washing point to ensure adherence to hand hygiene before the adolescents gain entry into their classrooms. Similarly, the enforcement of mask compliance and social distancing should be overseen by school prefects and protocol officers. Reports on the compliance rate of in-school adolescents should be compiled at the end of each week and presented to the school authorities. Such reports would to an extent assure the safety of all members of each school. This would also enable timely identification of the challenges to hand washing to chart strategies for its improvement.

Recommendations for the reduction of contact between in-school adolescents during school hours should be adhered to. This includes maintaining at least 1m distance between in-school adolescents either while gathering at the assembly or dining hall, during recess, or closing hours. Regulating school assembly to a maximum of twice a week would reduce the risk of clustering among adolescents as well as enhance maximal class involvement during class assembly. In addition, contact between adolescents during extra-curricular activities should be reduced to the barest minimum level. Novel modalities such as the division of the adolescents into different teaching sessions have proven to be effective in minimizing adolescent's contact with their peers. Such grouping is currently being adopted in government secondary schools in Nigeria, where junior students attend school between 8 and 11 am, while senior students attend school between 11 am and 2 pm on school days [10].

Adolescents are capable of actively understanding and imbibing disease-prevention rules. For this cause, consistent education regarding COVID-19 infection prevention and control (IPC) measures should be adequately communicated in school settings. As the adage goes, "Knowledge is power", the IPC lessons should be rapidly adopted into the school curriculum to empower the adolescents with adequate

information on COVID-19 prevention [1]. Rules on the wearing of face masks should also be upheld. Temperature screening and the correct placement of the mask (superiorly on the bridge of the nose, and inferiorly on the lower jaw) should be used as checks to permit entry into the school premises. Lessons on the proper use of face masks should be enhanced via IEC materials and through other peculiar modalities for disseminating information in each school.

Independent of the safety guidelines being implemented for in-school adolescents in school settings, the protection of teachers, school administrators, and caregivers should not be handled with levity. Teachers occupy a central point for optimal prevention of an infection in school settings. If COVID-19 safety measures address in-school adolescents only, its effectiveness would be limited. In lieu of this, maintaining a minimal physical distance of 1m, use of face masks, regular hand washing and disinfection of classrooms, toilet facilities, and surfaces must be ensured among teachers and other school personnel. Ensuring these preventive measures offers two advantages: Firstly, the risk of COVID-19 transmission among teachers becomes limited; and secondly, models are provided for in-school adolescents who would imbibe these precautionary practices.

Conclusion

Suspension of the school lockdown offers a promising approach to overcoming academic delay of in-school adolescents. Increasing COVID-19 cases secondary to school resumption is a potential challenge. To prevent spikes in COVID-19 cases and fatalities, all recommended COVID-19 preventive measures should be strictly adhered to. In addition, communication of COVID-19 safety protocols should be intensified by the school authorities. Also, penalties should be placed for all individuals who default from the COVID-19 precautionary measures in school settings.

Competing Interests

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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