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Os padrões diluídos de treinamento/trabalho devem ser restabelecidos para reduzir

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Should Diluted Training/Work Patterns Be Reinstated to Reduce Respiratory Tract Infections?

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RESUMO

infecções do trato respiratório?

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A pandemia da COVID-19 afectou o mundo inteiro com o rápido aumento do número de casos em 2020. Neste processo, muitos países tomaram diversas medidas. As medidas foram relaxadas e amplamente suspensas durante e após a pandemia. As medidas tomadas durante o período pandémico incluíram medidas como a obrigatoriedade do uso de máscaras, regras de distanciamento social, recolher obrigatório, restrições de viagens, cancelamento de eventos de massa, restrições ao número de pessoas, códigos de entrada-saída, ambientes educativos e empresariais diluídos, distanciamento educação e reuniões, e adiamento de consultas hospitalares. Além de reduzir o número de casos de COVID-19, estas medidas também resultaram na diminuição das infeccões respiratórias. No entanto, à medida que a pandemia terminou e as restricões foram levantadas, as infeccões respiratórias aumentaram novamente. Em particular, as infeccões transmitidas pelas escolas e locais de trabalho também se espalham em casa, aumentando o número de casos. Isso causou um aumento nas hospitalizações e nos custos econômicos. O uso de antibióticos também aumentou e as taxas de resistência bacteriana aumentaram. Como se pode perceber a partir destes pontos, a redução das restrições provocou um aumento das infecções respiratórias. Para compensar esta situação, poderá ser necessário reintroduzir restrições parciais. Neste contexto, pode ser recomendado o regresso a sistemas diluídos nas escolas e locais de trabalho, reduzir as horas de trabalho e educação, dar dias de folga extra, não ir ao trabalho ou à escola para aqueles que estão doentes e aumentar as restrições aos transportes públicos. Estas medidas podem controlar a propagação de infecções sem afectar negativamente a vida social.

ABSTRACT

The COVID-19 pandemic affected the whole world with the rapidly increasing number of cases in 2020. In this process, many countries took various measures. Measures were relaxed and largely lifted during and after the pandemic. The measures taken during the pandemic period included measures such as the obligation to use masks, social distance rules, curfews, travel restrictions, cancellation of mass events, restrictions on the number of people, entry-exit codes, diluted education and business environments, distance education and meetings, and postponement of hospital appointments. . In addition to reducing the number of COVID-19 cases, these measures also resulted in a decrease in respiratory infections. However, as the pandemic ended and restrictions were lifted, respiratory infections increased again. In particular, infections transmitted from schools and workplaces also spread at home, increasing the number of cases. This caused an increase in hospitalizations and economic costs. Antibiotic use has also increased and bacterial resistance rates have risen. As can be understood from these points, the reduction of restrictions caused an increase in respiratory infections. To offset this situation, partial restrictions may need to be reintroduced. In this context, it may be recommended to return to diluted systems in schools and workplaces, reduce work and education hours, give extra days off, not go to work or school for those who are sick, and increase public transportation restrictions. These measures can control the spread of infections without negatively affecting social life.

Dear Editor,

Coronavirus Disease - 2019 (COVID-19), whose first cases were seen in December 2019, spread all over the world within weeks and became a pandemic. Since the first months of 2020, the number of cases has gradually increased all over the world. For this reason, various measures have been taken in many countries. Later, with the introduction of vaccines, the number of cases decreased and the disease was generally brought under control in the first months of 2022. The measures taken were relaxed during the periods when the number of cases decreased and after the pandemic, and the measures were largely removed after the pandemic ended (1-4).

Some precautions taken to prevent the spread of infection during the pandemic period were as follows (3-5):

- · Obligation to use mask
- · Complying with social distance
- Curfews
- · Travel restrictions between cities or countries
- · Cancellation or postponement of mass events
- Restrictions on the number of people in public places
- Use of codes to enter and exit public places
- Diluted education or work environment with a shift-like system in schools or workplaces
- Reducing the number of days per week that must be attended at school or workplace
- · Conducting training and meetings remotely online
- Postponement or cancellation of routine appointments and surgeries in hospitals
- Obligation to be vaccinated

Such measures have slowed down the increase in the number of COVID-19 cases during the pandemic and even reduced the number of cases to some extent. However, apart from this, there has been a great decrease in the society, especially in respiratory tract infection cases, during the pandemic period. Especially masks, social distance and diluted orders in school/workplace environments have led to a significant reduction in respiratory transmitted diseases (1-5).

However, since the end of the pandemic, almost all restrictions have been lifted worldwide and the pre-pandemic order has largely returned. This situation has brought about a significant increase in the number of respiratory tract infection cases in the society. The increase in cases has accelerated further because people who are infected at school or at work also transmit this infection to their household. In addition, as infections increased again, hospitalization rates increased again and there was an increase in hospital-acquired infections. With the increase in respiratory tract infections, the number of days students can attend school has decreased and there has been a loss of workforce for employees. In addition, the fact that at least one antibiotic was prescribed for each infection or the patient was hospitalized, and laboratory tests and/or radiological examinations were performed on a significant majority of the patients, resulted in a great economic cost and hardship for other patients in need of these services. And in addition to all this, each additional antibiotic used has led to an increase in bacterial resistance rates worldwide (6-11).

All these points show that the restrictions during the pandemic period resulted in a decrease in the number of infections transmitted by close contact, such as respiratory tract infections, and that the old days were returned with the removal of the measures. The most appropriate solution to all these negative situations may be to impose some partial restrictions. The most balanced solution that can be made on this issue without negatively affecting social life is to switch to a partially attended system again in environments such as schools and workplaces, reduce work and education hours, take an extra day break from education and/or work on weekdays, allow those with any illness to come to school or work. The number of passengers in public transportation will be limited and the frequency of public transportation vehicles will be increased.

REFERENCES

- Blann AD, Heitmar R. SARS-CoV-2 and COVID-19: A Narrative Review. Br J Biomed Sci. 2022;79:10426. Published 2022 Sep 6. doi:10.3389/bjbs.2022.10426
- Rizvi SG, Ahammad SZ. COVID-19 and antimicrobial resistance: A cross-study. Sci Total Environ. 2022;807(Pt 2):150873. doi:10.1016/j.scitotenv.2021.150873
- Jaswaney R, Davis A, Cadigan RJ, et al. Hospital Policies During COVID-19: An Analysis of Visitor Restrictions. J Public Health Manag Pract. 2022;28(1):E299-E306. doi:10.1097/PHH.000000000001320
- Piccirillo V. COVID-19 pandemic control using restrictions and vaccination. Math Biosci Eng. 2022;19(2):1355-1372. doi:10.3934/mbe.2022062
- Loza AJ, Doolittle BR. The Effect of COVID-19 Pandemic Restrictions on Lead Screening in a Primary Care Clinic. J Pediatr Health Care. 2022;36(1):64-70. doi:10.1016/j.pedhc.2021.03.004
- Loosen SH, Plendl W, Konrad M, et al. Prevalence of Upper Respiratory Tract Infections Before, During, and After the COVID-19 Pandemic in Germany: A Cross-Sectional Study of 2 167 453 Outpatients. J Prim Care Community Health. 2023;14:21501319231204436. doi:10.1177/21501319231204436
- Hu L, Yang Y, Lin J, et al. Epidemiological characteristics of respiratory syncytial virus infection in pediatric patients before, during the COVID-19 pandemic and after easing of COVID-19 restrictive measures in China. J Med Virol. 2024;96(1):e29374. doi:10.1002/jmv.29374
- Ciofi Degli Atti M, Rizzo C, D'Amore C, et al. Acute respiratory infection emergency access in a tertiary care children hospital in Italy, prior and after the SARS-CoV-2 emergence. Influenza Other Respir Viruses. 2023;17(3):e13102. Published 2023 Mar 20. doi:10.1111/irv.13102
- Chow EJ, Uyeki TM, Chu HY. The effects of the COVID-19 pandemic on community respiratory virus activity. Nat Rev Microbiol. 2023;21(3):195-210. doi:10.1038/s41579-022-00807-9
- Dhochak N, Lodha R. Acute Respiratory Viral Infections in Children after COVID-19 Pandemic: What has Changed?. Indian J Pediatr. 2024;91(4):319-320. doi:10.1007/s12098-024-05039-8
- Eden JS, Sikazwe C, Xie R, et al. Off-season RSV epidemics in Australia after easing of COVID-19 restrictions. Nat Commun. 2022;13(1):2884. Published 2022 May 24. doi:10.1038/s41467-022-30485-3