EDITORS

World health observances in November 2020: adult and pediatric pneumonia, preterm birth, and chronic obstructive pulmonary disease in focus

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INTRODUCTION

Lung health is central to three world health observances in the month of November 2020: World Pneumonia Day, World Prematurity Day, and World COPD Day (Fig. 1). Thus, all three observances will be highlighted in Editorials in the pages of the November issue of the American Journal of Physiology-Lung Cellular and Molecular Physiology, as well as at our social media facilities.

WORLD PNEUMONIA DAY

World Pneumonia Day was first celebrated on 2nd November 2009, to address concerns that childhood pneumonia did not attract levels of support that were commensurate with disease burden, despite causing more deaths than human immunodeficiency virus (HIV)/acquired immunodeficiency syndrome (AIDS), tuberculosis, and malaria combined. Since 2010, World Pneumonia Day has been celebrated every 12th November (3, 13, 14, 17), to raise awareness about the toll of pneumonia on the world’s children (26), and to promote interventions to protect against (33), treat, and prevent the disease (21, 22), with particular emphasis placed on vaccine development (17, 46). World Pneumonia Day 2020 is particularly noteworthy, as this is the first World Pneumonia Day that will be observed during a global pneumonia pandemic. World Pneumonia Day is hosted by the Every Breath Counts coalition, a public-private partnership that supports national governments to work towards the aim of ending preventable child pneumonia deaths by 2030. The Every Breath Counts coalition also hosts the World Pneumonia Day digital observances will be highlighted in Editorials in the pages of the November issue of the American Journal of Physiology-Lung Cellular and Molecular Physiology, as well as at our social media facilities.

World Health Organization, in collaboration with the World Pneumonia Day Coalition, today launched a call for action by governments, partners, stakeholders, and citizens of the world to join together to stop pneumonia. At the launch of World Pneumonia Day 2020, WHO Executive Director, Dr Tedros Adhanom Ghebreyesus, said: "Pneumonia is a leading cause of childhood mortality. It is a tragedy that so many children die preventable deaths from pneumonia every day. This year, more than 800,000 children could have and should have survived, if we had acted with urgency and purpose. We are joining hands together in this call to stop pneumonia, and we are asking all of you to join hands with us in this call to stop pneumonia. Let us all stop pneumonia together."

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and clinical outcomes of patients affected with the “Captain of the men of death,” as pneumonia was called by Sir William Osler in 1901 (45), having borrowed the expression from John Bunyan’s reference to tuberculosis (9) in the 17th century.

WORLD PREMATURITY DAY

World Prematurity Day was first observed as International Prematurity Awareness Day on 17th November 2009, and has been observed thereafter as World Prematurity Day on 17th November every year since. World Prematurity Day is hosted by the European Foundation for the Care of Newborn Infants (EFCNI), in association with an ever-growing number of partner organizations that are committed to raising awareness about preterm birth, including the concerns of affected infants as well as those of their families (30, 34). One in every ten newborns is born prematurely. For this reason, a socks line has become a symbol for World Prematurity Day (Fig. 1), where the small pair of purple socks—framed by nine pairs of full-size baby socks—symbolizes the one in ten infants who are born preterm worldwide. The EFCNI also hosts the World Prematurity Day digital presence, at https://www.efcni.org/activities/campaigns/wpd/, and each World Prematurity Day is observed with a variety of public awareness and advocacy events all around the globe.

The global burden of preterm birth is estimated at 15 million preterm births worldwide, every year (39), and complications arising from preterm birth are the leading cause of death in children younger than five years of age (36). In addition to the morbidity and mortality associated with preterm birth in the neonatal period (the first month of life), preterm birth may lead to continued poor health in infancy (the first year of life), and

Fig. 1. Logos and publicity material for the observance of (counterclockwise from top, left) World Pneumonia Day, World Prematurity Day, and World COPD Day. The publicity material has been provided to the public for use to assist in the promotion of activities related to these three world health days by the Every Breath Count Coalition, the European Foundation for the Care of Newborn Infants, and the Global Initiative for Chronic Obstructive Lung Disease.
The 2020 theme for World Prematurity Day is “Together for babies born too soon—Caring for the future.” This theme intends to emphasize the need for synergistic interaction between healthcare professionals who manage preterm infants, scientists studying the physiological basis of the causes and consequences of preterm birth, parents and caregivers of preterm infants, and policy makers who formulate and implement measures to manage the burden of preterm birth (8, 20, 27, 29, 51, 61). To observe World Prematurity Day 2020, our Journal commissioned three Editorials, the first of which (63) is penned by Ms. Silke Mader, Chair of the Executive Board and co-founder of EFCNI; together with EFCNI Head of Scientific Affairs, Dr. Johanna Kostenzer, and EFCNI Senior Medical Director, Dr. Luc J. I. Zimmermann. Their Editorial addresses the management of bronchopulmonary dysplasia (BPD), the most common pulmonary complication of preterm birth that represents a significant challenge in the medical management of affected infants. A second Editorial (35), by Drs. Omella Lincetto and Anshu Banerjee, of the Department of Maternal, Newborn, Child and Adolescent Health and Aging at the World Health Organization, broadly overviews how the survival and quality of life of preterm infants may be improved on a global scale. A third Editorial (25) by our Editor-in-Chief, Dr. Rory E. Morty, together with Ms. Miša Gunjak, reviews the contribution of our Journal to understanding the pathophysiology of pulmonary disease associated with preterm birth and its medical management; and further highlights some important research areas that warrant attention at the laboratory bench.

The frequency of preterm birth is increasing (27, 61), and this is not only an issue in the developing world, since, for example, 1 in 8 infants are born preterm in the United States, compared with a global average of 1 in 10 (20). Advances in the medical management of preterm birth has resulted in a trend in improved survival of very low birth weight preterm infants (54, 55). However, these very low birth weight infants present with the most severe disease (1, 5, 6, 31, 32). Therefore, severe BPD will remain an important cause of morbidity and mortality in a neonatal intensive care setting. Given the increased prevalence of preterm birth, and the burden of severe consequences of preterm birth, investigatory studies that drive developments in preterm patient management have never been more urgent.

WORLD COPD DAY

World COPD Day is hosted by the Global Initiative for Chronic Obstructive Lung Disease (GOLD), and was launched in 2002 (60). The objective of World COPD Day is to raise awareness about chronic obstructive pulmonary disease (COPD) and to improve COPD care globally. To this end, each World COPD Day —celebrated annually on 18th November—is marked by a diverse range of online and public awareness activities, including, for example, free public spirometry testing (24, 37, 38, 50, 52, 59). In the United States, where COPD is the fourth leading cause of death (44, 47), these activities spread out over the month of November, which is National COPD Awareness Month in the United States (11, 12). National COPD Awareness Month is supported by the activities of the US COPD Coalition (https://uscopdcollection.org/) and the COPD Foundation (https://www.copdfoundation.org), among other organizations. Furthermore, the National Heart, Lung, and Blood Institute supports a national awareness and education campaign: “COPD Learn More Breathe Better” (10, 49). World COPD Day has a digital presence that is curated by GOLD, at https://goldcopd.org/world-copd-day/. The 2020 theme for World COPD Day is “Living Well with COPD—Everybody, Everywhere” (Fig. 1); which is intended to send a positive message to patients and providers that although COPD is without a cure, it remains possible for affected patients to actively live well.

The American Journal of Physiology has been publishing robust reports on the mechanisms of emphysema since 1913, starting with Dr. Arthur L. Tatum’s observation of emphysema in experimental rabbits with congenital hypothyroidism (57). World COPD Day 2020 is observed in the pages of our Journal with two Editorials. The first of these Editorials (4) is penned by Dr. Alvar Agustí, Chair of the GOLD Board of Directors, together with Dr. Claus Vogelmeier, Chair of the GOLD Science Committee, and Dr. Rosa Faner of the Centro de Investigación Biomédica en Red, Enfermedades Respiratorias in Barcelona, Spain. In their Editorial, Drs. Agustí, Vogelmeier, and Faner briefly review the evolution of thinking about COPD, from the Fletcher and Peto model of 1977 (19) into a new integrated pathogenic paradigm. In a second Editorial (7), Dr. Peter J. Barnes highlights the pressing need to better understand disease mechanisms, in particular of nonsmoking COPD, and the recognition of accelerated aging as a pathomechanism. Investigators working in the field of COPD are encouraged to submit manuscripts addressing any aspect of COPD to our Journal, which currently has two open Calls for Papers that directly address the pathophysiology of COPD: “Electronic Cigarettes: Not All Good News?”, and to specifically address the recognition of accelerated aging as a pathogenic factor, “Senescence in the Lung” (41).

The advent of COVID-19 and the severe viral pneumonia that the pandemic has brought with it, together with the increasing global burdens of both preterm birth and COPD, dramatically underscore the pressing need for accelerated efforts to understand the underlying pathophysiology of all three clinical entities. The collection of Editorials published in the November 2020 issue of the American Journal of Physiology-Lung Cellular and Molecular Physiology send a clear message: “the time is now” for us to accelerate the pace of investigative studies, so that we may guide advocacy, and develop new disease prevention and new disease management approaches for our affected pediatric and adult patients.

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REFERENCES


