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Journal of Pediatric Nursing xxx (xxxx) xxx



Contents lists available at ScienceDirect

Journal of Pediatric Nursing



journal homepage: www.pediatricnursing.org

Everything old is new again: COVID-19 and public health

In the fall of 1918, the influenza pandemic tore across the world. Public health nurses in cities throughout this country cared for some of the most vulnerable—sick children and families from poor communities, their fragile economies further devastated by this scourge. At that time, nurses' practices were governed by Florence Nightingale's precepts of good hygiene, nutrition, fresh air, and rest. They worked to do right by their patients, but their ability to make a difference was tempered by the lack of existing knowledge and resources needed to provide the most efficacious care possible.

If these words sound familiar to you, they are the same ones that began an editorial on the global H1N1 pandemic published in this Journal in 2009 (Vessey and Turner-Henson, 2010). Here we are, a decade later, in the midst of a new and more virulent pandemic, our care hampered by a lack of knowledge and resources.

COVID-19 is a new "equal opportunity" virus. It is more infectious than H1N1 influenza responsible for the pandemic a mere decade ago. Rates of infection from COVID-19 are high as transmission can occur before the infector manifests symptoms (Du et al., 2020), it is easily transmitted by droplet, and the entire world's population lacked immunity at its onset. Global public health initiatives are focused on preventing, containing, and mitigating the spread and severity of the disease.

The U.S. Centers for Disease Control (2020) and the American Academy of Pediatrics (2020) report that children are no greater risk for contracting the COVID-19 virus than adults. Generally children manifest similar symptoms as adults although in milder forms and rarely require hospitalization. These symptoms often mimic a cold and may include fever, cough, runny nose and shortness of breath. Other symptoms of vomiting and diarrhea in children have been reported (American Academy of Pediatrics, 2020; U.S. Centers for Disease Control, 2020). The need for hospitalization remains low for children 19 years and younger (Morbidity & Mortality Weekly Reports, 2020). Children with underlying complex respiratory, cardiac, renal and immuno-compromised conditions are at higher risk for severe illness and complications than healthy children (Royal College of Paediatrics and Child Health, 2020).

The immediate and long-term consequences of COVID-19 upon children are vast in terms of their health, safety and well-being. Although children have a low risk of serious illness, the unprecedented disruption of daily life for all families can affect them greatly. The isolation and restrictive measures that have been imposed upon children cause significant disruptions that are not well understood, confusing and even frightening. Not only do parents need to continuously monitor their children's health exposure and illness potential in the short-term but they now must deal with a host of uncertainties that surround their families. These uncertainties are pervasive and of paramount concern such as obtaining sufficient food and supplies, having to stay home from work with or without pay, home-schooling their children and meeting household expenses. These are vulnerable times for all families and their children, especially for families living paycheck to paycheck. Many of the long-term impacts of COVID-19 will go well beyond the initial phase of pandemic containment. COVID-19 has no specific viral affinity for the poor but those from lower socio-economic backgrounds will assume the greatest social burden.

Despite nearly a century of healthcare innovation, a new virus still can bring the world to its knees. The COVID-19 pandemic highlights the inadequacy of many national public health infrastructures in addressing the needs of their citizens, but especially those with limited social, educational, and economic resources. When this present pandemic abates, clinicians, scholars, and policy makers will examine the outcomes, our limited preparedness, and once again identify recurring capacity disparities while proposing remediation plans. These activities are requisite but insufficient.

Essential elements of preparedness for pandemics need to go beyond designing infection control measures, implementing early case detection and evidence-based treatments, and planning for rapid research responses for vaccine developments. Mending and reinforcing the social fabric is paramount as societies are only as their weakest threads. Evidence exists that universal healthcare, mandatory school nursing, community-based nursing and primary care, improved national health literacy, and mandatory paid family medical leave help reduce disparities and improve health outcomes wherever such policies have been executed across the globe. Unfortunately, widespread implementation of such strategies is all too often side-railed by ideological chasms or underfunded mandates. In the future, inclusive local, national, and global preparedness programs derived from an integrated nexus of health, educational, and social systems would help provide a more comprehensive response to pandemics.

Like public health nurses at the turn of 20th century, pediatric nurses today, we care for children in our practices and communities, finding innovative ways of helping families in their time of need. We need to applaud ourselves for these works as they are making a difference in these families' lives. But we also must recognize that such efforts have limited impact. Nurses remain the most respected of all professions and our potential to influence the health of our society is unboundless. Advocacy is needed at all levels of government and in diverse arenas of care. It is time for political activism to advance public health resources to children and families through policy and legislation. We all can contribute in some way. How will you step forward? To help in taking the first step,

https://doi.org/10.1016/j.pedn.2020.03.014 0882-5963/© 2020 Elsevier Inc. All rights reserved.

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please see the list of resources below that can be of valuable assistance to families who will have many questions about caring for their children during these difficult times.

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COVID-19 Resources for Families and Children

American Academy of Pediatrics: Critical Updates on COVID-19

https://services.aap.org/en/pages/2019-novel-coronavirus-covid-19-infections/.

Centers for Disease Control: COVID-19 and Children

https://www.cdc.gov/coronavirus/2019-ncov/faq.html?CDC_AA_refVal=https%3A%2F% 2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fprepare%2Fchildren-faq.html#a nchor_1584387482747.

Centers for Disease Control: Caring For Children in a Disaster

https://www.cdc.gov/childrenindisasters/helping-children-cope.html.

Healthy Children: What You Need to Know About Coronavirus

https://www.healthychildren.org/English/Pages/default.aspx.

National Association of Pediatric Nurse Practitioners: Coronavirus Safety: For Providers

https://www.napnap.org/coronavirus-safety.

National Association of School Nurses: COVID-19, Learn More

https://www.nasn.org/home.

National Association of School Psychologists

https://www.nasponline.org/.

Society of Pediatric Nursing: Information about Coronavirus: Novel Coronavirus Update and Resources

http://www.pedsnurses.org/p/cm/ld/fid=432.

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