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Editorial

The Mix of Science, Community Beliefs and Health Practices Affecting Children: Part 1



The ongoing national debates and media coverage continue as to important public health issues affecting children, adolescents and their families. Prominent among these public health issues concerns is vaccine hesitancy and refusal not only in this country but worldwide. The World Health Organization (WHO), has identified vaccine hesitancy "... the reluctance or refusal to vaccinate despite the availability of vaccines..." (2019a) is now identified as one of the ten threats to global health. This global phenomenon is alarming given the untoward and potentially lifelong disabling and deadly consequences associated with unvaccinated individuals. Acknowledging that lower levels of vaccinated children can result in the exposure of unvaccinated children to diseases that were once eradicated has now been identified as a global health threat by WHO. According to the WHO, nearly three million deaths are prevented with vaccinations each year (WHO, 2019a). Nevertheless, worldwide there has been a thirty percent increase of measles. Serious consequences of measles include blindness, intellectual disabilities and death. Just sixty-seven percent of children are reported to have received two measles doses worldwide (WHO, 2019b).

According to a recent WHO European report (2018), the increase in measles has been dramatic in 2018. According to 2018 WHO European data, there were 82, 596 reported cases of measles. Nearly 65% (53, 218) of the cases of measles were reported in the Ukraine alone, followed by Serbia (5076), Israel (2919), France (2913) and Italy (2517) of the top five countries affected in this region of the world (WHO Regional Office for Europe, 2019). In spite of the availability of the measles vaccine, in 2017, there were 110 000 measles-related deaths primarily affecting children under five years of age (WHO, 2018). Vaccine coverage for vulnerable children who live in low resource countries remains an ongoing challenge. It is estimated that nearly 20 million children living in the African continent are vulnerable to vaccine preventable diseases due to inadequate/no vaccinations (UNICEF/WHO, 2018).

In this country, the unforeseen consequences of parents choosing not to vaccinate their children are now affecting communities in ways not previously envisioned. Given the contagious period of nine days, wherein for 5 days before symptoms appear and 4 days after the appearance of symptoms, public health officials are scrambling to contain outbreaks reported in communities nationwide. Public health efforts can only be effective in containing outbreaks if the contagious individuals cooperate with public health officials in identifying exposure risks of where these individuals have exposed themselves to others. Unfortunately, this does not always occur resulting in extraordinary measures by public health officials.

For example, in a New York county, public officials officially issued exclusion orders for 59 schools. These orders mandated that

unvaccinated children were not allowed to attend school even with a medical or religious exemption (Otterman, 2019). In another New York county, children under the age of 18 who were unvaccinated were not allowed in public places, meaning schools, parks, stores—quite literally anywhere in the community (LaMott, 2019).

In the state of Washington, the outbreak of measles resulted in the declaration of a State of Emergency by Governor Jay Inslee. This declaration directed the *Washington State Comprehensive Emergency Management Plan* be instituted to contain and halt the spread of the measles outbreak (Office of the Governor, State of Washington, 2019). In a WA county considered to be the focal point of the measles outbreak, unvaccinated children and staff were not allowed to attend school for three weeks in an effort to protect them from contagious measles exposure (Lambert, 2019).

Additionally, states are examining the regulations pertaining to vaccine exemptions given the outbreaks of vaccine-preventable diseases. Currently, all states allow vaccine exemptions for medical reasons. Religious objections for vaccinations are recognized in forty-seven states. Presently, seventeen states allow vaccine exemptions for philosophical reasons (National Conference of State Legislatures, 2019). State-level public health strategies to control vaccine preventable diseases have varied. In 2015, California Senate Bill No. 277 was passed and signed by Governor Jerry Brown eliminated personal and religious vaccine exemptions (California Legislative Information, 2015). Several states (Connecticut, Delaware, Illinois, West Virginia) have passed legislation requiring medical documentation for exemption requests (National Conference of State Legislatures, 2019). In Delaware, in the event of a vaccine preventable disease outbreak, at risk unvaccinated children will not be allowed to attend school.

The vulnerability of unvaccinated children to measles is a growing concern despite the collective efforts of public officials and the health care community. The number of reported cases of measles for the first quarter of 2019 has surpassed cases reported for all of 2018 (Associated Press, 2019).

As our readers know, the public health issue of childhood immunizations has been featured several times in past editorials (Betz, 2018, 2008); however, it is a priority health concern of utmost importance in the United States and worldwide. The factors influencing vaccine hesitancy and refusal are complex and difficult to unwind. Parental protectiveness, the influence of the antivax movement, inaccurate content on the Internet, the lack of access to care, the social determinants of health, and the social media are contributory to this current public health dilemma (Broniatowski et al., 2018; Finnegan, 2011; Hotez, 2018; Lo & Hotez, 2017). Nurses have important roles as clinical experts, parent and child advocates, community members and policymakers to address

and confront this national and global public health concern. Recently, a group of nurses, belonging to the Orthodox Jewish Nurses Association were featured in a CNN news feature about their outreach efforts to educate their community on the importance of having children vaccinated. Their intervention efforts were recognized as an informed, professional, community-based and culturally competent strategy to deal with this community crisis (LaMott, 2019). This innovative nursing-directed intervention received national attention as to the important role nurses have in combating the problems associated with ensuring children are properly vaccinated. Our nursing community has, is and will continue to address this ongoing and widespread public health problem affecting children and their families in the U.S. and worldwide.

References

- Associated Press (April 1, 2019). Measles Count in US This Year Already More Than All of 2018 (2019). <https://www.usnews.com/news/health-news/articles/2019-04-01/measles-count-in-us-this-year-already-more-than-all-of-2018>.
- Betz, C. L. (2008). Immigrant Children: Unmet Needs and a Myriad of Nursing Concerns. *Journal of Pediatric Nursing*, 23, 157–160.
- Betz, C. L. (2018). Immunizations: A Coherent Mission and Vision for Pediatric and Child Health Nursing Practice, Education, Research and Policy. *Journal of Pediatric Nursing*, 42, A7–A8. <https://doi.org/10.1016/j.pedn.2018.07.01>.
- Broniatowski, D. A., Jamison, A. M., Qi, S., AlKulaib, L., Chen, T., Benton, A., ... Dredze, M. (2018). Weaponized Health Communication: Twitter Bots and Russian Trolls Amplify the Vaccine Debate. *American Journal of Public Health*, 108(10), 1378–1384. <https://doi.org/10.2105/AJPH.2018.304567>.
- California Legislative Information (2015). Senate Bill No. 277. Retrieved on April 2, 2019 from http://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB277.
- Finnegan, G. (March 18, 2011). "Bill Gates: Anti-vaccine myths 'kill children'". *Vaccines Today*. Retrieved on February 11, 2019 from <https://www.vaccines.today.eu/stories/bill-gates-anti-vaccine-myths-kill-children/>.
- Hotez, P. J. (2018). The global fight to develop antipoverty vaccines in the anti-vaccine era. *Human Vaccines & Immunotherapeutics*, 14, 2128–2131. <https://doi.org/10.1080/21645515.2018.1430542>.
- Lambert, J. (February 8, 2019). Measles Cases Mount In Pacific Northwest Outbreak. Retrieved on March 31, 2019 from: <https://www.npr.org/sections/health-shots/2019/02/08/692665531/measles-cases-mount-in-pacific-northwest-outbreak> February 8, 2019.
- LaMott, S. (2019). CNN Why New York hasn't contained the largest and longest measles outbreak in decades. Retrieved on March 31, 2019 from <https://www.cnn.com/2019/03/29/health/measles-ny-outbreak-fear-misinformation/index.html>.
- Lo, N. C., & Hotez, P. J. (2017). Public Health and Economic Consequences of Vaccine Hesitancy for Measles in the United States. *JAMA Pediatrics*, 171, 887–892.
- National Conference of State Legislatures (January 30, 2019). States with Religious and Philosophical Exemptions from School Immunization Requirements. Retrieved on April 2, 2019 from <http://www.ncsl.org/research/health/school-immunization-exemption-state-laws.aspx>.
- Office of the Governor, State of Washington (January 25, 2019). Proclamation by the Governor. Retrieved on March 31, 2019 from <https://www.governor.wa.gov/sites/default/files/proclamations/19-01%20State%20of%20Emergency.pdf>.
- Otterman, S. (January 19, 2019). New York Confronts Its Worst Measles Outbreak in Decades. Retrieved on March 31, 2019 from: <https://www.nytimes.com/2019/01/17/nyregion/measles-outbreak-jews-nyc.html>.
- UNICEF/WHO (July 2018). Progress and Challenges with achieving Universal Immunization Coverage: 2017 WHO/UNICEF Estimates of National Immunization Coverage. Retrieved on March 29, 2019 from https://www.who.int/immunization/monitoring_surveillance/who-immuniz.pdf?ua=1.
- WHO, Regional Office for Europe (August 20, 2018). Measles cases hit record high in the European Region. Retrieved on March 31, 2019 from <http://www.euro.who.int/en/media-centre/sections/press-releases/2018/measles-cases-hit-record-high-in-the-european-region>.
- WHO, Regional Office for Europe (February 1, 2019). EpiData, No. 1/2019, January 2018 - December 2018. Retrieved on March 29, 2019 from <http://www.euro.who.int/en/health-topics/disease-prevention/vaccines-and-immunization/publications/surveillance-and-data/who-epidata/who-epidata-no-12019>.
- World Health Organization (WHO) (November 29, 2018). Measles. Retrieved April 1, 2019 from: <https://www.who.int/en/news-room/fact-sheets/detail/measles>.
- World Health Organization (WHO) (2019a). Ten threats to global health in 2019. Retrieved on March 29, 2019 from <https://www.who.int/emergencies/ten-threats-to-global-health-in-2019>.
- World Health Organization (WHO) (2019b). Immunization coverage. Retrieved on March 29, 2019 from <https://www.who.int/en/news-room/fact-sheets/detail/immunization-coverage>.

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