



Considerations for School Nurses: Health Equity Implications During COVID-19 Pandemic

Disclaimer

This document provides a summary of currently available resources that school nurses can consult as they formulate independent nursing judgement for their practice or when participating in policy discussions in their districts. This document is not intended to provide clinical standards or guidelines. The school nurse is responsible for complying with applicable federal, state, and local laws, regulations, ordinances, executive orders, policies, and any other applicable sources of authority, including any applicable standards of practice. Published January 1, 2021.

Introduction

Children of racial or ethnic subgroups are disproportionately affected by COVID-19 and chronic diseases, such as asthma, diabetes, obesity, and mental health issues (Centers for Disease Control and Prevention [CDC], 2020, Leeb et al., 2020, National Center for Health Statistics, 2019). In the United States, 25% of children and adolescents have chronic health conditions, 7.5% have unmet health care needs, and 5% have multiple chronic conditions (Miller et al., 2016). School-aged children with a documented health condition, of Hispanic ethnicity or Black race have been more likely admitted to a hospital or intensive care unit than their White peers suffering from COVID-19 infection during the COVID-19 pandemic (Leeb et al., 2020). The presence of a chronic illness and potential long-term effects from COVID-19 may interfere with education, relationships, health and significantly affect future life outcomes.

Health Equity

The Robert Wood Johnson Foundation (RWJF) defines health equity as “everyone has a fair and just opportunity to be as healthy as possible” (Braveman et al., 2017, p. 2). Health equity is a moral and human rights principle focused on reducing and eliminating health disparities (Braveman et al., 2017). When obstacles, such as poverty, racial discrimination, powerlessness resulting in lack of access to health care, excellent education, quality jobs with a sustainable income, housing, and a safe environment, are removed, equity is obtained (Braveman et al., 2017). Equity allows people a reasonable and nondiscriminatory opportunity to attain healthiness (Braveman et al., 2017). School nurses can work towards health equity within their community by identifying racial discrimination and disparities that affect students' health and education, especially during the COVID-19 pandemic.

Chronic Disease

Asthma

Black, Hispanic, multiple-race non-Hispanic, Indigenous children, and children in lower socioeconomic status disproportionately share the burden of asthma. Asthma is more prevalent in children than in adults. In 2018, over 5.5 million, or 7.5%, children were diagnosed with asthma nationally (CDC, 2020). Nationally, non-Hispanic Black, Puerto Rican, multiple race non-Hispanic, and American Indian or Alaskan Native children have a higher prevalence of asthma - 14.2%, 13.6%, 13.0%, and 10.2%, respectively compared to their White counterparts (6.8%) in 2018 (CDC, 2020). Healthcare utilization for children with asthma, as seen in emergency department visits and hospitalization rates, is 2.6 times higher for Black children than White children (CDC, 2018).

Racial and socioeconomic neighborhood stratification due to current and historic structural processes, such as systemic racism and housing laws, has contributed to asthma disparities (Kranjac et al., 2017). Black children living in low socioeconomic neighborhoods have higher rates of asthma morbidity compared with White children. The causes of this disparity include inadequate access to medical treatment, exposure to higher levels of indoor/outdoor allergens in their environments related to housing conditions, and greater levels of ambient air pollutants (i.e., O₃, PM_{2.5}) (Kranjac et al., 2017; Loftus & Wise, 2016). Poor conditions commonly found in low-income housing, such as over-crowding, water damage, pest infestation, mold, and chipped paint, can trigger asthma exacerbations. (Kranjac et al., 2017). Additionally, children who live in high violence neighborhoods are susceptible to higher exposure to indoor air pollutants due to prolonged periods spent indoors (Kranjac et al., 2017)

Obesity

Black and Hispanic children are more likely to be overweight, obese, or have obesity-related diseases than non-Hispanic White children (Ryabov, 2018; Sharifi et al., 2016). The prevalence of childhood obesity in 2016 was 18.5% (CDC, 2019). Childhood obesity is a moderate predictor of adult chronic health conditions and disease: 31% of adulthood diabetes, 22% of hypertension, and 20% of adult cancers occurred in individuals who were categorized as obese or overweight in childhood (Llewellyn et al., 2016). Hispanic boys and Black girls have the highest prevalence rates of childhood obesity and the highest mean body mass index (BMI) scores (Min et al., 2018). There is a correlation between high pediatric BMI levels and low family income, household socioeconomic status, and education level (Min et al., 2018; Ryabov, 2018). Decreased opportunities for physical activity and increased availability of high-fat foods influence the occurrence of childhood sedentary or fast-food lifestyle (Min et al., 2018; Ryabov, 2018). Children of single-parents or those in large households have an increased risk of consuming prepared food items that are high in fat and sodium that contribute to a higher BMI score (Ryabov, 2018).

Children in low and middle-income groups have higher prevalence rates of obesity, 18.9% and 19.9%, respectively, compared with children in high-income groups, 10.9% (CDC, 2019). Hispanic and non-Hispanic White children who grow up in higher socioeconomic status homes and with at least one college-educated parent have a lower risk for obesity (Fradkin et al., 2015). However, there is no association between socioeconomic status and obesity in Black children (Fradkin et al., 2015). There is an inverse correlation between socioeconomic status and obesity in White children (Wang, 2011). The built environment contributes to obesity disparities, but not as much as the socioeconomic status of the neighborhood (Sharifi et al., 2016). However, these do not entirely explain racial and ethnic childhood obesity disparities (Sharifi et al., 2016).

Diabetes

There are racial/ethnic disparities surrounding children with type 1 (T1D) and type 2 (T2D) diabetes (Divers et al., 2020). Between 2002 and 2015, there was a steeper increase in the number of T1D among Black, Hispanic, Asian and Pacific Islander children than White children (Divers et al., 2020). Additionally, there are racial and ethnic disparities in incidence rates of children with T2D; American Indians (3.69), Black (5.97), and Hispanic (6.45) children have the highest incidence, compared with White children (0.77/100,000) who have the lowest incidence of T2D (Divers et al., 2020).

Although T1D incidence are highest among White children and adolescents, Black children experience higher mortality rates (Saydah et al., 2017). Between 2012 and 2014, Black children had the highest mortality rate from diabetes than White and Hispanic children; Black children's death rate was 2.22 times White children's death rate, and 3.36 times Hispanic children's death rates (Saydah et al., 2017). These disparities may be due to differences in healthcare access and services, diabetes self- and parent-management education, and overall diabetic care (Saydah et al., 2017). Black children with T1D have higher mean hemoglobin A1c and more often experience diabetic ketoacidosis and severe hypoglycemia than White and Hispanic children (Willi et al., 2015).

Racial and ethnic disparities in insulin treatment methods and outcomes exist in children with T1D after adjusting for socioeconomic status. For example, White children use insulin pumps more frequently than Black or Hispanic children (Willi et al., 2015). Black and Hispanic children with T2D experience inadequate glycemic control more often than White children (Butler, 2017; Rothman et al., 2008). Low caregiver educational attainment, high levels of stress, and low socioeconomic status contribute to poor glycemic control in children with T2D and can create adverse psychosocial outcomes (Butler, 2017). Black children with T2D experience lower quality of life due to the disease than White children. Also, Hispanic parents/guardians have a higher caregiver burden due to disease management (Butler, 2017).

Mental Health and Trauma

Children in racial and ethnic subgroups disproportionately experience exposure to poverty, food insecurity, violence, neighborhood disorganization, repeated experiences of discrimination, and chronic exposure to racism, which are risk factors for poor mental health (Alegria et al., 2010). Increased isolation and poverty rates are correlated with an increased risk of developing adjustment difficulties, depression, behavior problems, anxiety, and related disorders, such as posttraumatic stress disorder [PTSD] (Alegria et al., 2010). Those with mental-health illness in childhood, such as PTSD, anxiety, aggressive behavior, and depression, experience an increased risk of developing physical and mental health problems in adulthood, ultimately impacting health and academic achievement (Abrams et al., 2020; Larson et al., 2017).

Children in racial and ethnic subgroups, children living in single-parent households, children whose caregivers have low education levels, and those living in poverty are at a greater risk of experiencing exposure to trauma (Larson et al., 2017). Chronic exposure to trauma increases the risk of developing mental health disorders, school problems, emotional and behavioral difficulties, substance use, and sexually risky behavior and negatively impacts future educational and social advancement and employment (Larson et al., 2017). There is an inverse correlation between community violence and performance and engagement in school, with a higher school dropout rate in children exposed to chronic traumas (Larson et al., 2017)

Non-Hispanic Black and Hispanic youth and those with low socioeconomic status disproportionately lack access to mental health treatments and mental healthcare providers, as evidenced by lower medical expenditures and mental health service utilization compared to affluent, White children (Abrams et al., 2020; Hodgkinson et al., 2017; Larson et al., 2017). Non-Hispanic Black children have the highest rates of mental-health-related emergency department visits (Abrams et al., 2020). The rates of mental health-related emergency department visits are more rapidly increasing for Hispanic children than non-Hispanic White children (Abrams et al., 2020). White children use outpatient mental health services more than Black and Latino children (Larson et al., 2017).

Children of lower socioeconomic status have higher rates of unmet mental health needs and mental health problems than children of higher socioeconomic status (Hodgkinson et al., 2017). Low-income minority children are less likely than their White counterparts to access mental health care treatment (Larson et al., 2017). Families receiving public insurance was a predictor of less access to mental health care treatment (Larson et al., 2017). Children with public insurance are more likely than children with private insurance to have a gap in mental health insurance coverage (Larson et al., 2017). Additionally, children in low socioeconomic standing



have a worse posttraumatic response because their low-resource environment impedes their ability to recover from traumatic experiences and increases the likelihood of future mental health impairments (Andrews et al., 2015).

Area of residence also impacts access to mental health treatment. White children are more likely to receive mental health treatment in urban areas than Black children and Latino children (Hodgkinson et al., 2017). However, White children in rural areas are less likely to receive mental health care than White children in urban areas (Hodgkinson et al., 2017). There are no racial or ethnic disparities for students receiving mental health treatment in school (Larsen et al., 2017). However, rural Black students had higher participation rates in school-based mental health screening programs than White adolescents (Larson et al., 2017).

School Nurses Can Address Inequities

It is school nurses' moral and ethical duty to address inequities that surround health and education. A school nurse must critically assess the social determinants of health that affect students' health and well-being (American Nurses Association [ANA] & National Association of School Nurses [NASN], 2017). According to the Standards of School Nursing Practice, Standard 7, the school nurse must protect human rights, promote health diplomacy, enhance cultural sensitivity, and reducing health disparities through a school-wide approach to identify and dismantle inequities within the education setting (ANA & NASN, 2017). Furthermore, the school nurse can address inequities by encompassing Standard 8, culturally congruent practice, and Standard 16, utilizing "appropriate resources to plan, provide, and sustain evidence-based nursing practices that are safe, effective, and fiscally responsible" (ANA & NASN, 2017, p. 80).

Health equity is a practice component of the Community/Public Health principle in the *Framework for the 21st Century School Nursing Practice™ (Framework)* (NASN, 2016; 2020). In addition, all the principles of the Framework (i.e., Care Coordination, Leadership, Quality Improvement, Community/Public health, and Standards of Practice) encompass skills that school nurses use daily to help students be healthy, safe, and ready to learn (NASN, 2016). In achieving health equity, school nurses may use community/public health skills, including connecting students and their families to resources that address rent assistance, unemployment benefits, or food access. Additionally, school nurses should provide information to eligible children's families or guardians to enroll them in healthcare coverage by Medicaid or the Children's Health Insurance Program (CHIP). The school nurse embodies the principle of Leadership by becoming an influential member of a school system or state-level interdisciplinary advocacy team that addresses systemic racism and critically evaluates, creates, and edits policies to reduce disparities and provide resources that promote equity. The school nurse collects data on the number of case management supports provided for students which meet the Quality Improvement principle implementation. The principle of Standards of Practice is the guiding principle for the school nurse decisions and actions in the provision of school



nursing services using clinical guidelines, evidenced-based practice, and critical thinking to problem solve identified social needs and racial inequities. Finally, the school nurse uses the principle of Care Coordination to encourage the inclusion of a culturally competent, evidence-based curriculum that assists in recognizing implicit bias and addresses racism ([NASN, 2016; 2020a; 2020b; National Association of State School Nurse Consultants, 2020](#)).

The COVID-19 Pandemic

The Annie E. Casey Foundation reported from mid-September to mid-October 2020, families with children in their homes had serious issues during the pandemic. Racial and ethnic subgroups were adversely impacted. 23% of Black families and 19% of Latino families expressed sometimes or often not having enough food to eat, compared to 10% of White families. In addressing the possibility of losing their homes, 36% of Black families, 39% of Hispanic families, and 30% of White families reported that they were likely to be evicted or foreclosed on (2020). The majority of those experiencing issues are concentrated among Black and Latino households, households with annual incomes below \$100,000, and households experiencing job or wage losses since the start of the outbreak (RWJF, 2020). The COVID-19 pandemic has amplified health disparities that are apparent among vulnerable communities. Students, their families, and school staff within these communities may experience unequal access to testing, treatment, and preventive measures and be at an increased risk for illness due to pressures to continue working in unsafe conditions.

School Nurse Health Equity Assessment and Resources

School nurses can assist students and families during the COVID-19 pandemic and return-to-school by assessing family social needs by asking the following questions to identify obstacles to health equity and provide resources to remove identified obstacles. It is essential that school nurses establish a trusted, confidential interaction with students and families when conducting this assessment and are sensitive to the questions and responses that are exchanged.

Assessment questions include:

- **HEALTH INSURANCE COVERAGE - Does your child have health insurance?**
 - If the student is not insured, offer state and local resources for Medicaid or other insurance enrollment.
 - Resources include:
 - Coverage resource - go [here](#)
 - State programs go - [here](#) or call 1-877-KIDS-NOW (1-877-543-7669)
 - School-based outreach and enrollment toolkit - go [here](#)
 - Identify county and state contacts for enrollment and set up an appointment
 - Or refer to local insurance coverage experts
 - Identify if the school has staff to enroll families in Medicaid, SNAP, or other programs

- If the student has a high deductible health insurance plan, families may not have financial resources for out-of-pocket costs for sick visits or prescriptions. See section Access to Healthcare.
- HOUSING – Do you currently have secure housing?
 - Connect with local resources to assist in housing
 - Public schools have access to McKinney-Vento funds to help families secure temporary housing
- HOUSING - Can you afford to pay rent/mortgage?
 - Connect with local resources to assist in housing
- EMPLOYMENT STATUS – Are you or family breadwinner currently employed?
 - If not employed, ask if they have applied for unemployment assistance
 - Resources include:
 - Provide a list of local family advocates that can help get health coverage or benefits due to unemployment.
 - Information regarding unemployment benefits under the CARES act - go [here](#)
 - Health coverage options for the unemployed - go [here](#)
 - Medicaid and CHIP information – go [here](#)
- FINANCIAL STATUS – Are you having difficulty paying your bills? Which bills do you need help with paying?
 - Information regarding bill assistance - go [here](#)
- FOOD SECURITY - Do you have access to enough food for the family? Do you ever worry about how to make your food supply last longer? Does your student receive food at school?
 - Provide food access resources in the community, including food pantries, charitable food delivery organizations, and SNAP/WIC.
 - Help applying for free or reduced meals at school
 - Resources include:
 - [SNAP](#)
 - [WIC](#)
 - [Free and Reduced-Price School Meals](#)
 - [Food distribution programs](#)
 - [Food and Nutrition Services \(FNS\) programs](#)
 - [Child Nutrition Programs](#)

- ACCESS TO HEALTH CARE - When was your student's last well-child or health care visit?
 - Review student's immunization status
 - Review student's prescription drug status
 - Provide resources for providers at federally qualified health centers or community providers accepting uninsured or under insured children
 - Provide information on Vaccines for Children programs in your community
 - Provide resources for prescription drugs if uninsured and not eligible for Medicaid.
 - <https://www.americaspharmacy.com/howitworks>
 - Provide suggestions for local pharmacies, such as Walmart, CVS, Walgreens, and others that provide generic discounted prescriptions
- ACCESS TO HEALTH CARE - Do you have a vehicle or access to transportation to get to medical appointments or COVID-19 testing sites?
 - If the family has Medicaid, the cost of transportation to medical appointments is covered

Questions Specific to the COVID-19 Pandemic

- PERSONAL PROTECTIVE EQUIPMENT - Do you have the personal protective equipment you need, such as cloth masks for your student, yourself, hand soap, cleaning products, hand sanitizer?
 - Provide school or community resources to provide masks/PPE, cleaning products, and hygiene products to children and families such as PTA's or faith-based organizations.
- COVID-19 RISK - Has anyone in your household contracted COVID-19? Been in close contact with any person who may be sick with COVID-19? Travel to areas where COVID-19 is high? Been around anyone who has traveled from another state or country?
 - Connect families with local public health.
- COVID-19 EXPOSURE PLAN - What is your plan for you and your family if exposed to COVID-19? Can you and your family isolate for 7-14 days? What is your plan for working, income, and/or food access?
 - Provide a list of locations within your community that provide COVID-19 testing
 - Provide phone number of the local health department that does contact tracing if exposed
- EDUCATION RESOURCE – INTERNET OR WI/FI ACCESS - Do you have access to reliable internet and/or Wi-Fi at home? Is your school/community providing hot spots or technical support to families?

- Provide community-based organizations providing free public Wi-Fi
- Assistance for lowering the cost of the internet - go [here](#)
- EDUCATION RESOURCE – TABLET ACCESS - Do you have a tablet for remote based learning for your student? Do you have enough tablets? Is your school or community providing tablets, such as chrome books or lap top computer, to families?
 - Provide local community or school-based resources for tablets, chrome books, or laptops
- WORK/SCHOOL BALANCE - Are you currently working out of the home during school hours? Will you be home if the student is home doing remote learning? Will the student be alone during the day? Can you help your student(s) with schooling, and do you feel confident assisting the student?
 - Provide community childcare resources such as Boys & Girls Club and faith-based organizations
- MENTAL HEALTH - How are things going at home? How do you feel about the relationships in your life? How does your partner treat you? Are you and your children safe in your current living situation?
 - Domestic abuse, addiction issues, incarceration, or other social needs may arise during this time.
 - Connect with school/community support or mental health services if there was an exposure/illness/death related to COVID-19
 - Additional resources for students, families (and school staff) include:
 - [COVID-19 Resources to Prevent Child Abuse](#)
 - [School Mental Health Resources for COVID-19](#)
 - [COVID-19 resources for k-12 schools from the CDC](#)
 - [Talking to Children About COVID-19](#)
 - [Trauma-Informed School Strategies Due to COVID-19](#)
 - [Coping in Hard Times: Fact Sheet for School Staff](#)
 - National Domestic Violence information – [go here](#)
 - Substance Abuse and Mental Health Services Administration - go [here](#)
 - School nurses are mandatory reporters of child abuse and neglect. Further information may be found [here](#) and state statutes [here](#)
- CLOSING - Are there any other concerns or needs that you need assistance with?

**Additional Equity and Racism Resources**

- [Tools to Raise an Anti-racist Generation](#)
- [Diverse children's books](#)
- [Anti-racist Reading List](#)
- [Preventing Racial Inequity in Schools and Beyond](#)
- [Talking About Race](#)
- [Talking Race With Young Children](#)
- [Talking to Children About Race](#)
- [Implicit Bias Resource Guide](#)

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References

- Abrams, A. H., Badolato, G. M., Boyle, M. D., McCarter, R., & Goyal, M. K. (2020). Racial and ethnic disparities in pediatric mental health-related emergency department Visits. *Pediatric Emergency Care*. <https://doi.org/10.1097/PEC.0000000000002221>
- Alegria, M., Vallas, M., & Pumariega, A. J. (2010). Racial and ethnic disparities in pediatric mental health. *Child and adolescent psychiatric clinics of North America*, 19(4), 759–774. <https://doi.org/10.1016/j.chc.2010.07.001>
- American Nurses Association & National Association of School Nurses. (2017). *School nursing: Scope and standards of practice (3rd Ed)*. Authors.
- Andrews, A. R., 3rd, Jobe-Shields, L., López, C. M., Metzger, I. W., de Arellano, M. A., Saunders, B., & Kilpatrick, D. G. (2015). Polyvictimization, income, and ethnic differences in trauma-related mental health during adolescence. *Social psychiatry and psychiatric epidemiology*, 50(8), 1223–1234. <https://doi.org/10.1007/s00127-015-1077-3>
- The Annie E. Casey Foundation. (2020). Kids, families, and COVID-19. Pandemic pain points and the urgent need to respond. Baltimore, MD. <https://www.aecf.org/resources/kids-families-and-covid-19>
- Braveman, P., Arkin, E., Orleans, T., Proctor, D., & Plough, A. (2017). *What is health equity? And what difference does a definition make?* Robert Wood Jonson Foundation. <https://www.rwjf.org/en/library/research/2017/05/what-is-health-equity-.html>
- Butler, A. M. (2017). Social determinants of health and racial/ethnic disparities in type 2 diabetes in youth. *Current Diabetes Reports*, 17(8), 60. <https://doi.org/10.1007/s11892-017-0885-0>
- Centers for Disease Control and Prevention. (2020, March). *Asthma*. https://www.cdc.gov/asthma/most_recent_national_asthma_data.htm
- Centers for Disease Control and Prevention. (2019, June). *Prevalence of childhood obesity in the United States*. <https://www.cdc.gov/obesity/data/childhood.html>
- Centers for Disease Control and Prevention. (2018). *Asthma in children*. <https://www.cdc.gov/vitalsigns/childhood-asthma/index.html>
- Divers, J., Mayer-Davis, E.J., Lawrence, J.M. (2020, February). *Rates of new diagnoses cases of type 1 and type 2 diabetes continue to rise among children, teens*. <https://www.cdc.gov/diabetes/research/reports/children-diabetes-rates-rise.html>
- Fradkin, C., Wallander, J. L., Elliott, M. N., Tortolero, S., Cuccaro, P., & Schuster, M. A. (2015). Associations between socioeconomic status and obesity in diverse, young adolescents: variation across race/ethnicity and gender. *Health Psychology*, 34(1), 1–9. <https://doi.org/10.1037/hea0000099>
- Hodgkinson, S., Godoy, L., Beers, L.S., & Lewing, A. (2017). Improving mental health access for low-income children and families in the primary care setting. *Pediatrics*, 123 (1). <https://doi.org/101542/peds.2015-1175>

- Kranjac, A. W., Kimbro, R. T., Denney, J. T., Osiecki, K. M., Moffett, B. S., & Lopez, K. N. (2017). Comprehensive neighborhood portraits and child asthma disparities. *Maternal and Child Health Journal*, 21(7), 1552–1562. <https://doi.org/10.1007/s10995-017-2286-z>
- Larson, S., Chapman, S., Spetz, J., & Brindis, C. D. (2017). Chronic childhood trauma, mental health, academic achievement, and school-based health center mental health Services. *Journal of School Health*, 87(9), 675–686.
- Leeb, R.T., Price, S., Sliwa, S., Kimball, A., Szucs, L., Catuso, E., Godfred-Cato, S., Lozier, M., (2020, October 2). COVID-19 trends among school-aged children – United States, *Morbidity Mortality Weekly Report*, March 1 – September 19, 2020, 69. <http://dx.doi.org/10.15585/mmwr.mm6939e2>
- Llewellyn, A., Simmonds, M., Owen, C. G., & Woolacott, N. (2016). Childhood obesity as a predictor of morbidity in adulthood: a systematic review and meta-analysis. *Obesity Reviews*, 17(1), 56–67. <https://doi.org/10.1111/obr.12316>
- Loftus, P. A., & Wise, S. K. (2016). Epidemiology of asthma. *Current Opinion in Otolaryngology & Head and Neck Surgery*, 24(3), 245–249. doi: 10.1097/MOO.0000000000000262
- Miller, G. F., Coffield, E., Leroy, Z., & Wallin, R. (2016). Prevalence and costs of five chronic conditions in children. *Journal of School Nursing*, 32(5), 357–364. <https://doi.org/10.1177/1059840516641190>
- Min, J., Wen, X., Xue, H., & Wang, Y. (2018). Ethnic disparities in childhood BMI trajectories and obesity and potential causes among 29,250 US children: Findings from the Early Childhood Longitudinal Study- Birth and kindergarten cohorts. *International Journal of Obesity*, 42. 1661-1670. <https://doi.org/10.1038/s41366-018-0091-4>
- National Association of State School Nurse Consultants. (2020). Statement on racism in America. http://www.schoolnurseconsultants.org/wp-content/uploads/2020/08/NASSNC-RacismStatement_FINAL-08012020-2.pdf
- National Association of School Nurses. (2016). Framework for 21st century school nursing practice: National Association of School Nurses. *NASN School Nurse*, 31(1), 45-53. doi: 10.1177/1942602X15618644
- National Association of School Nurses. (2020a). *Eliminate racism to optimize student health and learning* (Position Brief). Silver Spring, MD: Author. <https://higherlogicdownload.s3.amazonaws.com/NASN/3870c72d-fff9-4ed7-833f-215de278d256/UploadedImages/PDFs/Position%20Statements/pb-eliminate-racism.pdf>
- National Association of School Nurses. (2020b). Framework for 21st Century School Nursing Practice™: Clarifications and updated definitions. *NASN School Nurse*, 35(4), 225-233. <http://doi.org/10.1177/1942602X20928372>
- Rothman, R. L., Mulvaney, S., Elasy, T. A., VanderWoude, A., Gebretsadik, T., Shintani, A., Potter, A., Russell, W. E., & Schlundt, D. (2008). Self-management behaviors, racial disparities, and glycemic control among adolescents with type 2 diabetes. *Pediatrics*, 121(4), e912–e919. <https://doi.org/10.1542/peds.2007-1484>

- Ryabov, I. (2018). The role of residential segregation in explaining racial gaps in childhood and adolescent obesity. *Youth & Society*, 50(4), 485–505
- Robert Wood Johnson Foundation. (2020). *The impact of coronavirus on households across America*. <https://www.rwjf.org/en/library/research/2020/09/the-impact-of-coronavirus-on-households-across-america.html>
- Saydah, S., Imperatore, G., Cheng, Y., Geiss, L.S., Albright, A. (2017). Disparities in diabetes deaths among children and adolescents- United States, 2000-2014. *Morbidity Mortality Weekly Report*, 66, 502-505. <http://dx.doi.org/10.15585/mmwr.mm6619a4>
- Sharifi, M., Sequist, T. D., Rifas-Shiman, S. L., Melly, S. J., Duncan, D. T., Horan, C. M., Smith, R. L., Marshall, R., & Taveras, E. M. (2016). The role of neighborhood characteristics and the built environment in understanding racial/ethnic disparities in childhood obesity. *Preventive medicine*, 91, 103–109. <https://doi.org/10.1016/j.ypmed.2016.07.009>
- Wang, Y. (2011). Disparities in pediatric obesity in the United States. *Advanced Nutrition*, 2, 23-31. <https://doi.org/10.3945/an.110.000083>
- Willi, S. M., Miller, K. M., DiMeglio, L. A., Klingensmith, G. J., Simmons, J. H., Tamborlane, W. V., Nadeau, K. J., Kittelsrud, J. M., Huckfeldt, P., Beck, R. W., Lipman, T. H., & T1D Exchange Clinic Network. (2015). Racial-ethnic disparities in management and outcomes among children with type 1 diabetes. *Pediatrics*, 135(3), 424–434. <https://doi.org/10.1542/peds.2014-1774>