

Domestic Violence and Abuse Is Our Issue



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There is growing literature on the impact of domestic violence and abuse (DVA) on development and worsened control of various atopic conditions. Domestic violence and abuse is a pervasive global public health issue with a myriad of health sequelae that negatively impact all communities. As a form of gender-based violence, DVA disproportionately affects girls and women along with the historically marginalized or those at the intersection of multiple forms of oppression. However, studies on DVA and atopic diseases in adults have mostly been limited to cross-sectional data and understanding patterns of association.¹

Nash et al² address pivotal knowledge gaps in this growing area of research by utilizing a retrospective longitudinal design; evaluating DVA's relationship with the development of various atopic conditions; and conducting the study with a large, diverse, and generalizable U.K. population. For women without prior history of atopic conditions, women exposed to DVA were compared with those unexposed in terms of new diagnoses of asthma, atopic dermatitis, and allergic rhinoconjunctivitis. Four unexposed women were matched by age and deprivation quintile, reflecting socioeconomic status, to each exposed patient. The authors adjusted their analyses for smoking status.

They included 13,852 exposed and 49,036 unexposed women in their analyses with median follow-up period of 2.45 and 3.11 person-years, respectively. Compared with unexposed women, the DVA-exposed group had higher proportion of current smoking. In adjusted analyses, women exposed to DVA had 52% increased risk of developing an atopic disease during the study period. This pattern remained consistent when evaluating each individual condition: 69% increased risk of developing asthma, 40% increased risk of developing atopic dermatitis, and 63% increased risk of developing allergic rhinoconjunctivitis. Two sensitivity analyses—the first evaluating those whose DVA exposure occurred only during the study period and the second adding ethnicity as a covariate—supported the robustness of these findings.

Whereas prospective birth cohort studies have demonstrated increased incidence of atopic diseases such as asthma in children born to DVA-exposed women,¹ Nash et al² are novel in their

discovery to suggest increased risk of atopy in adults. Their findings are timely and bring to light that DVA may be a potent inducer of the development or exacerbation of atopic diseases for adults. Multiple cross-sectional studies in adults have substantiated the association between DVA exposures and the increased prevalence of atopic conditions such as asthma. However, the temporal relationship was unknown. Other studies in adults have evaluated the relationships between DVA and worsened disease morbidity, such as increased asthma exacerbations, but also via cross-sectional design.³

Widely prevalent and long underaddressed, DVA remains a significant public health problem with broad health sequelae. A growing body of data consistently establishes DVA as a risk factor for a multitude of chronic health conditions and higher burden of disease morbidity.⁴ Domestic violence and abuse, frequently a form of severe and chronic trauma, has tangible effects on our patient population and the diseases we treat. And yet, despite evidence-based recommendations from the U.S. Preventive Services Task Force,⁵ our screening and referral rates for this endemic public health problem remain woeful. Without appropriate screening and trauma- and violence-informed care, our abilities to address and mitigate DVA's downstream health consequences are greatly hindered.

Domestic violence and abuse is not solely a health consideration for primary care or obstetrics and gynecology practices, where stronger efforts for appropriate screening and referral have begun to be implemented. Domestic violence and abuse has been implicated not only in the development of asthma and atopy but also in their higher burdens of uncontrolled disease and exacerbations.¹⁻³ Domestic violence and abuse exposure may inform novel clinical phenotypes at higher risk of developing atopy and poorer related health outcomes. Clearly, trauma- and violence-informed research and care are critically needed in our field.

Therefore, we all have pivotal roles to play.

EDUCATORS

Training future clinicians and scientists nuanced in trauma- and violence-informed care and research involves education on the social determinates of health and systems of oppression that foster traumatic experiences.⁶ The profound impacts of social determinates of health, not merely factors affecting health but also important mechanisms driving disease pathogenesis and pathophysiology, should be part of core curricula throughout trainees' medical training and physicians' continuing medical education.

CLINICIANS

Medical personnel can be one of the key points of contact for those experiencing DVA. While decision-making can be complex during and after DVA, clinicians can be an invaluable avenue as a nonjudgmental source of validation, support, and empowerment.

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We should be conducting clinical care through a trauma- and violence-informed framework sensitive to social determinants of health, including intersectionality and structural violence. Being aware of our implicit biases and how they influence our practices and interactions is critical. Additional concrete and practical steps include recognizing signs, symptoms, and health effects of trauma; making decisions in partnership with patients; appropriate screening and referral; training staff; resisting practices that promote retraumatization; and engaging referral and community organizations.⁶

RESEARCHERS

As mechanistic research into the effects of trauma on asthma and atopy grows, dysfunction of various regulatory systems, including neuroendocrine and immune functions, have been implicated.^{7,8} Population-based studies continue to corroborate the association of gender-based violence with increased burdens of atopic diseases and their worsened health outcomes. Associated behavioral and biological correlates, such as posttraumatic stress disorder, tobacco smoking, and traumatic brain injuries leading to cognitive sequelae affecting medication adherence, can contribute greatly to poorer disease control.¹ There is great complexity and heterogeneity shaping the role of DVA on health. Its high prevalence and significant health consequences demand further research.

RESEARCH FUNDERS

Agencies should encourage and fund proposals to further understand DVA as an important social determinant of health in asthma and atopy. These should include proposals utilizing gender-based violence and intersectionality frameworks, and span studies evaluating biopsychosocial mechanisms, translational projects identifying and targeting intervenable factors to alleviate the health sequelae of DVA, and dissemination and implementation of science research on trauma- and violence-informed, evidence-based practices.

HEALTH CARE SYSTEMS AND ADMINISTRATORS

Health care organizations should be aligned with trauma- and violence-informed practices to support related clinical and research operations. For instance, training of nonclinical staff, such as front desk and security personnel, is often pivotal in promoting a safe environment and reducing retraumatization. Institutional practices to promote a trauma-informed culture include building awareness and generating buy-in throughout the organization, supporting a culture of staff wellness, creating a safe environment, and hiring a workforce both representative of

the community and nuanced in trauma- and violence-informed care.⁹

Importantly, DVA disproportionately affects specific groups and intersects with other forms of structural violence. Historically marginalized groups and those at the intersection of more than one form of systemic oppression carry increased burdens of DVA's health sequelae.¹⁰ Therefore, trauma- and violence-informed care and DVA research may be pivotal for promoting health equity and prevention of disease development in groups most harmed by disparities in care and health outcomes.

Our rates of gender-based violence have not substantially improved over the years and remain a critical public health issue and determinant of health and disease.¹⁰ This problem necessitates advocacy and interventions from all levels within medicine and specifically our field. The pervasive nature of DVA, undoubtedly affecting a multitude of our patients, and its profound health effects call for our active roles. While the evidence grows to become more compelling, our actions to address domestic violence and abuse and its very real and significant health sequelae are overdue.

REFERENCES

1. Wang E, Zahid S, Moudgal AN, Demaestri S, Wamboldt FS. Intimate partner violence and asthma in pediatric and adult populations: a systematic review. *Ann Allergy Asthma Immunol* 2022;128:361-78.
2. Nash K, Minhas S, Metheny N, Gokhale KM, Taylor J, Bradbury-Jones C, et al. Exposure to domestic abuse and the subsequent development of atopic disease in women. *J Allergy Clin Immunol Pract* 2023;11:1752-6.
3. Wang E, Simmons B, Holm KE, Alam R, Wamboldt FS. Intimate partner violence and adult asthma morbidity: a population-based study. *J Allergy Clin Immunol Pract* 2021;9:4300-4309.e7.
4. Breiding MJ, Black MC, Ryan GW. Chronic disease and health risk behaviors associated with intimate partner violence—18 U.S. states/territories, 2005. *Ann Epidemiol* 2008;18:538-44.
5. U.S. Preventive Services Task Force, Curry SJ, Krist AH, Owens DK, Barry MJ, Cughey AB, et al. Screening for intimate partner violence, elder abuse, and abuse of vulnerable adults: US Preventive Services Task Force final recommendation statement. *JAMA* 2018;320:1678-87.
6. Brown T, Berman S, McDaniel K, Radford C, Mehta P, Potter J, et al. Trauma-Informed Medical Education (TIME): advancing curricular content and educational context. *Acad Med* 2021;96:661-7.
7. Wright RJ. Alternative modalities for asthma that reduce stress and modify mood states: evidence for underlying psychobiologic mechanisms. *Ann Allergy Asthma Immunol* 2004;93:S18-23.
8. Yim IS, Kofman YB. The psychobiology of stress and intimate partner violence. *Psychoneuroendocrinology* 2019;105:9-24.
9. Menschner C, Maul A. Key Ingredients for Successful Trauma-Informed Care Implementation. Trenton, NJ: Center for Health Care Strategies, Inc; 2016.
10. Stockman JK, Hayashi H, Campbell JC. Intimate partner violence and its health impact on ethnic minority women [corrected]. *J Womens Health (Larchmt)* 2015;24:62-79.