

Home > Journal > Social Sciences & Humanities > PSYCH

[Indexing](#) [View Papers](#) [Aims & Scope](#) [Editorial Board](#) [Guideline](#) [Article Processing Charges](#)

PSYCH > Vol.1 No.1, April 2010

OPEN ACCESS

Community Violence as Psychosocial Stressor: The Case of Childhood Asthma in Boston

PDF (Size: 90KB) PP. 27-34 DOI: 10.4236/psych.2010.11005

Author(s)

Gonzalo Bacigalupe, Takeo Fujiwara, Sabrina Selk, Meghan Woo

ABSTRACT

Childhood asthma is a critical public health problem of urban centers in the United States and other industrialized nations. Population-based and laboratory research studies indicate that psychosocial stress differentially affects asthma expression. Witnessing or experiencing community violence is a psychosocial stressor that results in long-term biological changes that may in turn contribute to asthma morbidity. This is a review of the literature that examines the exposure to violence as a psychosocial stressor that is independently associated with asthma morbidity even after adjustment for income, housing, and other adverse life events. In addition to acting as a physiological trigger for the disease, community violence can also impact health behaviors and exposure to other unknown environmental risk factors. This connection leads the authors to suggest that reducing violence and the amelioration of its impact has implications beyond public health. The City of Boston in Massachusetts serves as the context to contextualize a series of recommendations that may ameliorate and/or prevent asthma incidence and prevalence. The reduction of poverty, unemployment, substandard housing, and high crime/violence rates can have significant health implications for children asthma and a decline on asthma hospitalization.

KEYWORDS

Psychosocial Stress, Violence, Asthma, Public Health

Cite this paper

Bacigalupe, G. , Fujiwara, T. , Selk, S. & Woo, M. (2010). Community Violence as Psychosocial Stressor: The Case of Childhood Asthma in Boston. *Psychology*, 1, 27-34. doi: 10.4236/psych.2010.11005.

References

- [1] M. I. Asher, "Recent Perspectives on Global Epidemiology of Asthma in Childhood," *Allergologia et Immuno-pathologia*, 2010.
- [2] D. R. Williams, M. Sternthal and R. J. Wright, "Social Determinants: Taking the Social Context of Asthma Seriously," *Pediatrics*, Vol. 123, Suppl. 3, 2009, pp. 174- 184.
- [3] S. F. Suglia, M. B. Enlow, A. Kullowatz and R. J. Wright, "Maternal Intimate Partner Violence and Increased Asthma Incidence in Children: Buffering Effects of Supportive Caregiving," *Archives of Pediatrics and Adolescent Medicine*, Vol. 163, No. 3, 2009, pp. 244-250.
- [4] S. V. Subramanian and M. H. Kennedy "Perception of Neighborhood safety and Reported Childhood Lifetime Asthma in the United States (U.S.): A Study Based on a National Survey," *PLoS One*, Vol. 4, No. 6, 2009, p. e6091.
- [5] T. J. Marin, E. Chen, J. A. Munch and G. E. Miller, "Double-Exposure to Acute Stress and Chronic Family Stress is Associated with Immune Changes in Children with Asthma," *Psychosomatic Medicine*, Vol. 71, No. 4, 2009, pp. 378-384.
- [6] H. Rhee, M. J. Belyea and K. S. Elward, "Patterns of Asthma Control Perception in Adolescents: Associations with Psychosocial Functioning," *Journal of Asthma*, Vol. 45, No. 7, 2008, pp. 600-606.
- [7] Y. Peeters, S. N. Boersma and H. M. Koopman, "Predictors of Quality of Life: A Quantitative

- [Open Special Issues](#)
- [Published Special Issues](#)
- [Special Issues Guideline](#)

[PSYCH Subscription](#)

[Most popular papers in PSYCH](#)

[About PSYCH News](#)

[Frequently Asked Questions](#)

[Recommend to Peers](#)

[Recommend to Library](#)

[Contact Us](#)

Downloads: 247,343

Visits: 543,288

[Sponsors >>](#)

Investigation of the Stress-Coping Model in Children with Asthma," *Health Qual Life Outcomes*, Vol. 6, No. 24, 2008.

- [8] R. T. Cohen, G. J. Canino, H. R. Bird and J. C. Celedon, " Violence, Abuse and Asthma in Puerto Rican Children," *American Journal of Respiratory and Critical Care Medicine*, Vol. 178, No. 5, 2008, pp. 453-459.
- [9] R. J. Wright, H. Mitchell, C. M. Visness, et al. " Community Violence and Asthma Morbidity: The Inner-City Asthma Study," *American Journal of Public Health*, Vol. 94, No. 4, 2004, pp. 625-632.
- [10] S. V. Subramanian, L. K. Ackerson, M. A. Subramanyam and R. J. Wright, " Domestic Violence is Associated with Adult and Childhood Asthma Prevalence in India," *International Journal of Epidemiology*, Vol. 36, No. 3, 2007, pp. 569-579.
- [11] P. Ellwood, M. Asher, R. Beasley, T. Clayton and A. Stewart, " The International Study of Asthma and Allergies in Childhood (ISAAC): Phase Three Rationale and Methods," *International Journal of Tuberculosis and Lung Disease*, Vol. 9, No. 1, 2005, pp. 10-16.
- [12] N. L. Lugogo and M. Kraft " Epidemiology of Asthma," *Clinics in Chest Medicine*, Vol. 27, No. 1, 2006, pp. 1-15.
- [13] D. Mannino, D. Homa, L. Akinbami, J. Moorman, C. Gwynn and S. Redd, " Surveillance for Asthma," *United States, 1980-1999, MMWR Surveill Summ'* 02, Vol. 51, No. 1, pp. 1-13.
- [14] K. B. Weiss and S. D. Sullivan " The Health Economics of Asthma and Rhinitis. I. Assessing the Economic Impact," *Journal of Allergy and Clinical Immunology*, Vol. 107, No. 1, 2001, pp. 3-8.
- [15] K. B. Weiss, P. J. Gergen and T. A. Hodgson, " An Economic Evaluation of Asthma in the United States," *New England Journal of Medicine*, Vol. 326, No. 13, 1992, pp. 862-866.
- [16] Massachusetts Department of Public Health, " First State-wide Pediatric Asthma Report Released." <http://www.mass.gov/dph/media/2004/pr0504.htm>
- [17] M. Lara, L. Akinbami, G. Flores and H. Morgenstern, " Heterogeneity of Childhood Asthma among Hispanic children: Puerto Rican Children Bear a Disproportionate Burden," *Pediatrics*, Vol. 117, No. 1, 2006, pp. 43-53.
- [18] D. R. Gold and R. Wright, " Population Disparities in Asthma," *Annual Review of Public Health*, Vol. 26, 2005, pp. 89-113.
- [19] National Center for Health Statistics Centers for Disease Control and Prevention, Summary Health Statistics for U.S. Children: National Health Interview Survey, 2002. In: *Vital and Health Statistics*, Department of Health and Human Services, Washington, DC, 2004.
- [20] Boston Public Health Commission Research Office. *Health of Boston 2002*. Boston Public Health Commission, Boston, 2005.
- [21] D. Buchwald, J. Goldberg, C. Noonan and J. Beals and S. Manson, " Relationship between Post-Traumatic Stress Disorder and Pain in Two American Indian Tribes," *Pain Medicine*, Vol. 6, No. 1, 2005, pp. 72-79.
- [22] R. Wright, " Health Effects of Socially Toxic Neighborhoods: The Violence and Urban Asthma Paradigm," Vol. 27, No. 3, 2006, pp. 413-421.
- [23] J. Gern, C. Visness, P. Gergen, et al. " The Urban Environment and Childhood Asthma (URECA) Birth Cohort Study: Design, Methods and Study Population," *BMC Pulmonary Medicine*, Vol. 9, 2009, pp. 17.
- [24] P. Lehrer, S. Isenberg and S. Hochron, " Asthma and Emotion: A Review," *Journal of Asthma*, Vol. 30, No. 1, 1993, pp. 5-21.
- [25] S. Romagnani, " Induction of TH1 and TH2 Responses: A Key Role for the ' Natural' Immune Response?" *Immunol Today*, Vol. 13, No. 10, October 1992, pp. 379-381.
- [26] R. J. Wright and S. F. Steinbach, " Violence: An Unrecognized Environmental Exposure that may Contribute to Greater Asthma Morbidity in High Risk Inner-City Populations," *Environmental Health Perspectives*, Vol. 109, No. 10, 2001.
- [27] P. G. Holt, " Immunoprophylaxis of Atopy: Light at the End of the Tunnel?" *Immunol Today*, Vol. 15, No. 10, 1994, pp. 484-489.

- [28] A. Yabuhara, C. Macaubas, S. L. Prescott, et al., " TH2- Polarized Immunological Memory to Inhaled Allergens in Atopics is Established during Infancy and Early Childhood," *Clinical and Experimental Allergy*, Vol. 27, No. 11, 1997, pp. 1261-1269.
- [29] R. Wright, S. Weiss, S. Cohen, M. Hawthorne and D. Gold, " Life Events, Perceived Stress, Home Characteristics and Wheeze in Asthmatic/Allergic Families," *American Journal of Respiratory and Critical Care Medicine*, Vol. 153, 1996, pp. A420.
- [30] R. J. Wright, H. Mitchell, C. M. Visness, et al., " Community Violence and Asthma Morbidity: The Inner-City Asthma Study," *American Journal of Public Health*, Vol. 94, No. 4, 2004, pp. 625-632.
- [31] T. Lindhorst, B. Beadnell, L. J. Jackson, K. Fieland and A. Lee, " Mediating Pathways Explaining Psychosocial Functioning and Revictimization as Sequelae of Parental Violence among Adolescent Mothers," *American Journal of Orthopsychiatry*, Vol. 79, No. 2, 2009, pp. 181-190.
- [32] D. Finkelhor, H. Turner, R. Ormrod, S. Hamby and K. Kracke, " Children' s Exposure to Violence: A Comprehensive National Survey," *Juvenile Justice Bulletin*, 2009, pp. 1-10.
- [33] K. Sheehan, J. A. DiCara, S. LeBailly and K. K. Christoffel, " Children' S Exposure to Violence in an Urban setting," *Archives of Pediatrics and Adolescent Medicine*, Vol. 151, No. 5, 1997, pp. 502-504.
- [34] L. Taylor, B. Zuckerman, V. Harik and B. Groves, " Witnessing Violence by Young Children and Their Mothers," *International Journal of Occupational Medicine and Environmental*, Vol. 15, No. 2, 1994, pp. 120-123.
- [35] R. J. Wright and S. F. Steinbach, " Violence: An Unrecognized Environmental Exposure that may Contribute to greater asthma morbidity in High Risk Inner-City Populations," *Environmental Health Perspectives*, Vol. 109, No. 10, 2001, pp. 1085-1089.
- [36] M. P. Jensen, J. A. Turner, J. M. Romano and P. Karoly, " Coping with Chronic Pain: A Critical Review of the Literature," *Pain*, Vol. 47, No. 3, 1991, pp. 249-283.
- [37] R. F. Anda, J. B. Croft, V. J. Felitti, et al., " Adverse Childhood Experiences and Smoking during Adolescence and Adulthood," *Journal of the American Medical Association*, Vol. 282, No. 17, 1999, pp. 1652-1658.
- [38] E. Aisenberg, " The Effects of Exposure to Community Violence upon Latina Mothers and Preschool Children," *Hispanic Journal of Behavioral Sciences*, Vol. 23, 2001, pp. 378-398.
- [39] H. Foster and J. Brooks-Gunn, " Toward a Stress Process Model of Children' S Exposure to Physical Family and Community Violence," *Clinical Child and Family Psychology Review*, Vol. 12, No. 2, 2009, pp. 71-94N. A. Ashford, " Implementing the Precautionary Principle: Incorporating Science, technology, fairness and accountability in Environmental, Health and Safety Decisions," *International Journal of Occupational Medicine & Environmental*, Vol. 17, No. 1, 2004, pp. 59-67.
- [40] D. I. Sheppard and S. Bilchik, " Promising Strategies to Reduce Gun Violence: Report," *Office of Juvenile Justice and Delinquency Prevention, Cosmos Corporation, Washington, D.C., United States, 1999.*
- [41] B. D. Smedley, A. Y. Stith and A. R. Nelson, " Institute of Medicine (U.S.). Committee on Understanding and Eliminating Racial and Ethnic Disparities in Health Care. *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care,*" National Academy Press, Washington, D.C., 2003.
- [42] The Disparities Project, " Data Report: A Presentation and Analysis of Disparities in Boston," *Boston Public Health Commission, Boston, 2005.*
- [43] M. Viswanathan, A. Ammerman, E. Eng, et al. " Community-Based Participatory Research: Assessing the Evidence," *Agency for Healthcare Research and Quality, Rockville, 2004.*
- [44] R. D. Lasker and E. S. Weiss, " Broadening Participation in Community Problem Solving: A Multidisciplinary Model to Support Collaborative Practice and Research," *Journal of Urban Health*, Vol. 80, No. 1, pp. 14-47, 2003, pp. 48-60.
- [45] P. J. Kelly, " Practical Suggestions for Community Interventions Using Participatory Action Research," *Public Health Nursing*, Vol. 22, No. 1, 2005, pp. 65-73.