

## Learning Asthma: Linking Asthma Education to Urban Youth's Lives

Lisa Simon, Ph.D.

City College – City University of New York

[lisimon@ccny.cuny.edu](mailto:lisimon@ccny.cuny.edu)

APHA, Washington, D.C., 2011

The high incidence of asthma in urban communities has many ramifications including: 1) the reality that many urban children and youth have in-depth experience with the disease; and 2) that these young people have a great need to develop their knowledge of asthma. However, asthma education is not as effective as it needs to be to address these needs (Christiansen & Zuraw, 2002; Gent, van Essen-Zandvliet, Klijn, Rackel, Kimpen, & van Der Ent, 2008; Handleman, Rich, Bridgemohan, & Schneider, 2004; Tse, Palakiko, & Texeira, 2005; Velsor-Friedrich, Vlases, Moberley, & Coover, 2004). As findings from research on asthma education highlight, teaching cannot focus solely on lung functioning and compliance. To be effective, education must recognize asthma's multiple dimensions as well as learners' beliefs and understandings about asthma (Gent, et. al., 2008; Handelman, et. al., 2004; Tse, et. al., 2005; Velsor-Friedrich, et. al., 2004).

This presentation draws from research on how struggling classed, urban adolescents understand asthma. Data analysis demonstrates that participants saw asthma as something that could not be controlled. This conceptualization is in conflict with the emphasis in asthma management on overall asthma control (Gent, et. al., 2008). While this conflict suggests these participants did not have extensive knowledge about asthma, the data demonstrates the opposite. Participants had strong recognition of overt asthma symptoms and in-depth understanding of asthma triggers. In fact, it was their knowledge of symptoms and triggers that supported their belief that asthma could not be controlled. For example, their awareness of environmental triggers accompanied their awareness that such triggers could never be completely eliminated. The drawing above provides one participant's representation of asthma's uncontrollability.



These findings illuminate the need to reconceptualize asthma education. Currently, curricula emphasize teacher-driven approaches that marginalize learners' beliefs. To increase effectiveness, approaches must take into account learners' understanding of asthma and the focus on lung functioning must expand to recognize the multiple

dimensions of asthma in urban lives. Curricula that emphasize only biomedical information are likely to *reinforce* learner's beliefs that asthma is uncontrollable. To help learners understand how asthma is a chronic but manageable condition, we must use an approach that is in dialogue with learners (Handelman, et. al., 2004; Tse, et. al., 2005).

### **Specific Recommendations for Increasing Teaching Effectiveness:**

- Value learners' questioning and critique. Recognize and address learners' concerns and experiences;
- Highlight the invisible biomedical processes of asthma. Connect these unseen processes to learners' understanding of overt symptoms and to management;
- Use asthma timelines<sup>1</sup> to explore the history of asthma to help learners:
  - Understand why management rather than a cure became the focus;
  - Expand learners' understanding of "the pump";
  - Recognize the ongoing development of asthma knowledge and their role in that history;
- Use resources that address the multiple dimensions of asthma:
  - Games, role plays, drawing: Understandings of asthma;
  - Maps, photographs: Asthma zones, asthma and poverty, industrial concerns;
  - Murals,<sup>2</sup> narratives, timelines: Asthma in people lives, asthma activism, evolving understanding of asthma.

### **Advocacy**

- Highlight opportunities for students to advocate for asthma awareness. For example, they can identify what they want teachers and doctors to know about asthma;
- Health educators also need to advocate for teachers to have accurate knowledge about asthma;
- Highlight for teachers relevant connections between their subject and asthma
  - Biology: Disease (genetics and environment), medicine; research skills;
  - History: History of asthma (timeline);
  - Literature: Metaphors to describe asthma, asthma narratives;
  - Art: Artistic depictions of asthma (mural, collage);

---

<sup>1</sup> Two good timelines are:

[http://www.asthma.org.uk/how\\_we\\_help/research/research\\_achievements/asthma\\_timeline.html](http://www.asthma.org.uk/how_we_help/research/research_achievements/asthma_timeline.html)

<http://www.nlm.nih.gov/hmd/breath/breathhome.html>

<sup>2</sup> See "Living with Asthma" mural: <http://www.elpuente.us/arts/asthma.html>

- Physical Education: Exercise and asthma.