

Environmental justice issues of air pollution on children's mental health

Melissa Alcaide, Jesse Delman, Anna Kireeva, Mayra Palacios, Davia Powell, Amber Torvund

School of Social Work, Adelphi University

Introduction

Children's mental health is a critical factor in their development.¹ Air pollution has been a critical concern for environmental justice issues.² There is a gap in research that connects air pollution to children's mental health. This presentation current research focused on this correlation. Further issues correlated to these effects are also discussed.

Materials and methods

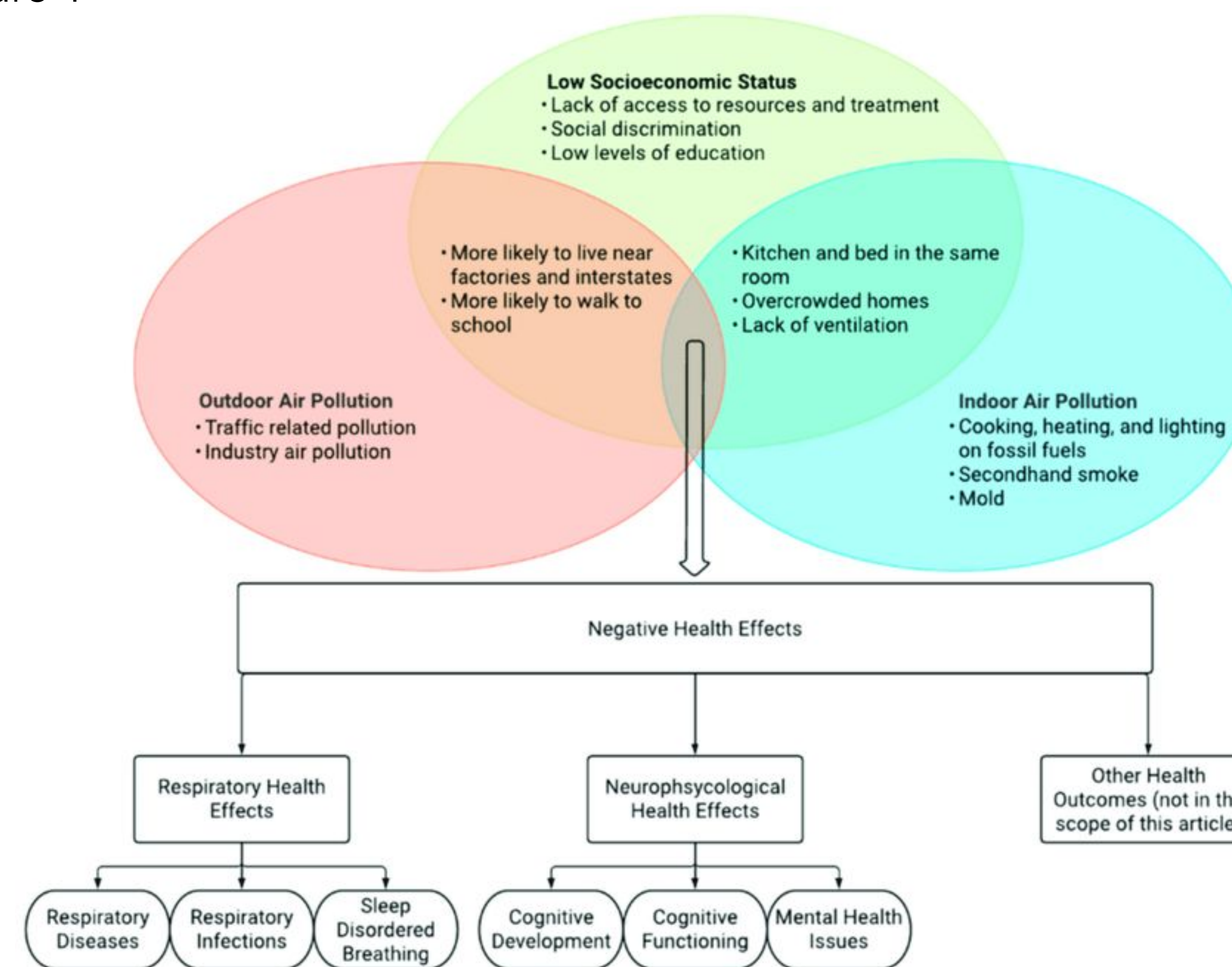
A literature review was conducted on research regarding children's mental health in correlation with air pollution. Results focused on key words such as: "air pollution" AND "mental health;" "children's mental health," and "air pollution" AND "development." Results were cross-checked with similar research findings.

Results

Air pollution is commonly caused by "harmful pollutants emitted by industries, households, and road traffic".³ These air pollutants have been known to cause mental health issues such as depression,⁴ ADHD;⁵ anxiety and withdrawal;⁶ asthma⁷; and cognitive development.⁸ The graphic below (Figure 1⁹) outlines how issues of air pollution as a social issue is related to other social justice issues; these include connections between air pollution and children in lower income neighborhood¹⁰ and urban areas.¹¹

Healthy development of children's mental health plays a critical role in later stages of life.¹² Poor mental health for children is related to Alzheimer's and Parkinson's in mature age¹³ and other comorbid conditions in their life.¹⁴

Figure 1⁹



Conclusions

Current data seems to suggest a correlation between air pollutants, emitted by various sources, and numerous mental health issues among children. However, there are an insufficient number of studies that have been conducted to state with any certainty that this correlation is confirmed. By furthering this investigation into the effects of air pollution on children's mental health we may be able to determine the ways in which air pollution contributes to numerous cognitive deficits in children and learn more specifically how to ameliorate the damage caused by air pollution. As stated in the preamble of the NASW Code of Ethics, the main mission of an individual working in the social work profession is to improve upon the well being of individuals and help them in meeting their basic needs. Social workers have a responsibility to actively find and improve issues within society that hinder a person's health and safety. Children are at a very fragile state in their development and as a result are especially vulnerable to factors, such as air pollution, that might impair their cognitive development. Research should continue in this area to protect children and raise societal awareness as to the detrimental effects of air pollution.