

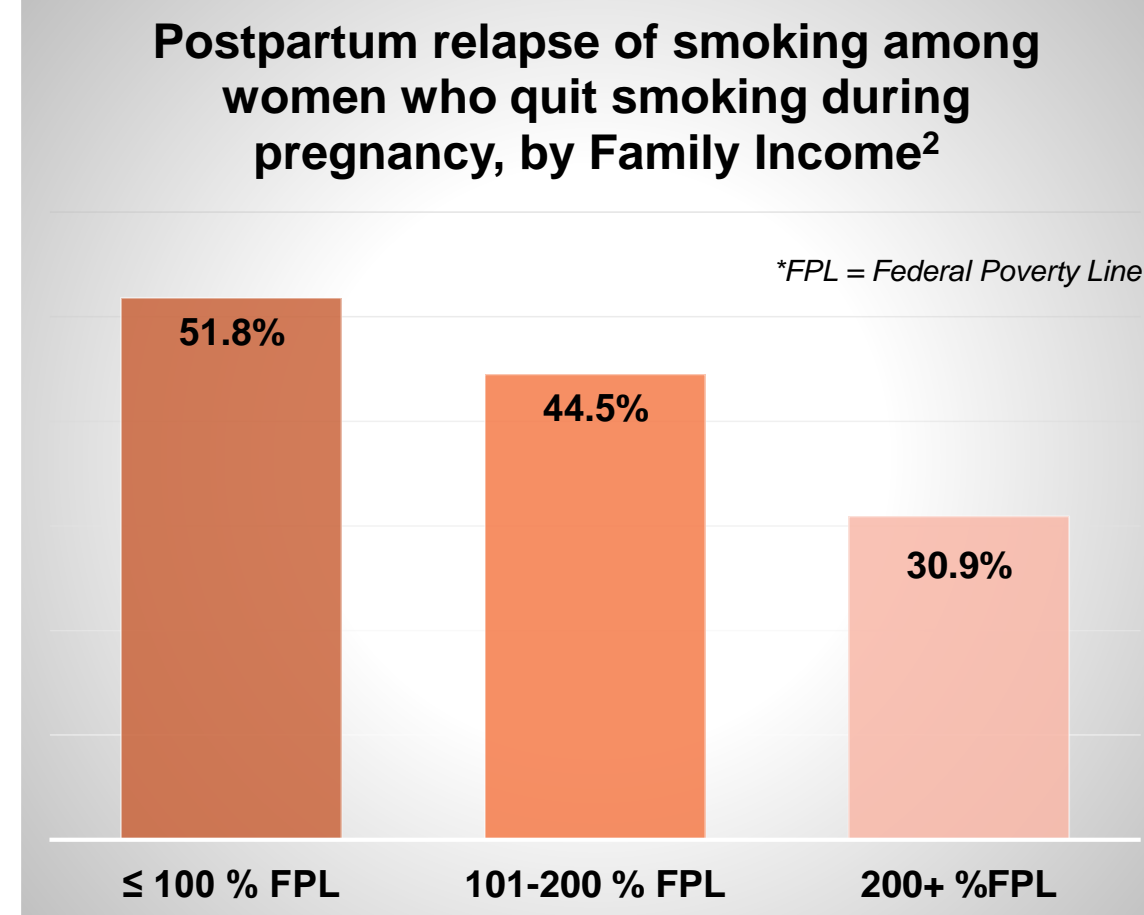


Postpartum Smoking Cessation and Its Related Factors

Ashley M. Jones MSN-RN, CLC, CTTS¹; Carol Shieh, DNSc, MPH, RNC-OB¹; Lisa K. Staten, PhD²; Lisa Carter-Harris, PhD, APRN, ANP-C¹; Deborah Stiffler, PhD¹; Jon Macy, PhD³

¹ Indiana University School of Nursing, Indianapolis, IN; ² Indiana University Fairbanks School of Public Health, Indianapolis, IN; ³ Indiana University School of Public Health, Bloomington, IN

BACKGROUND AND GOALS



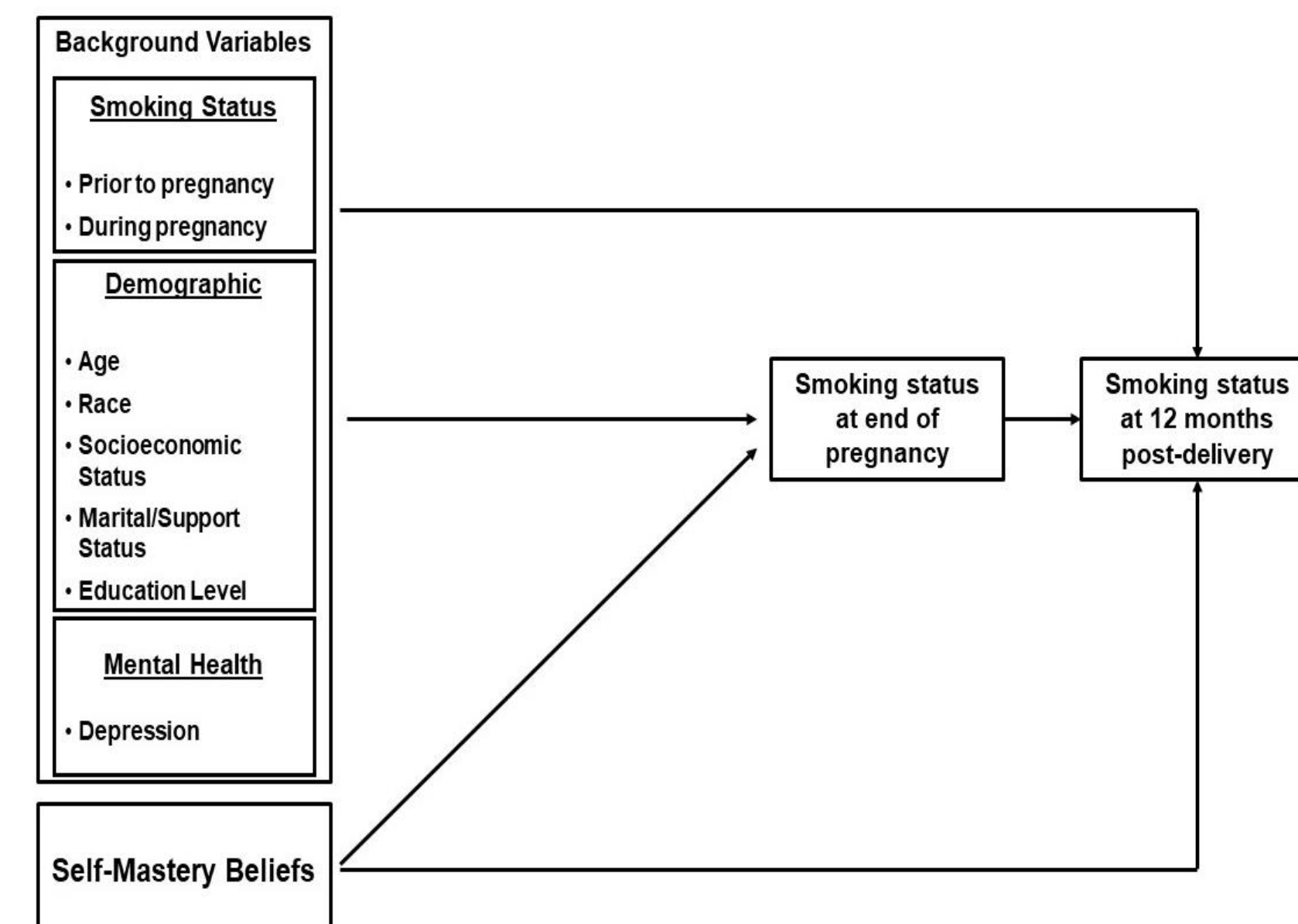
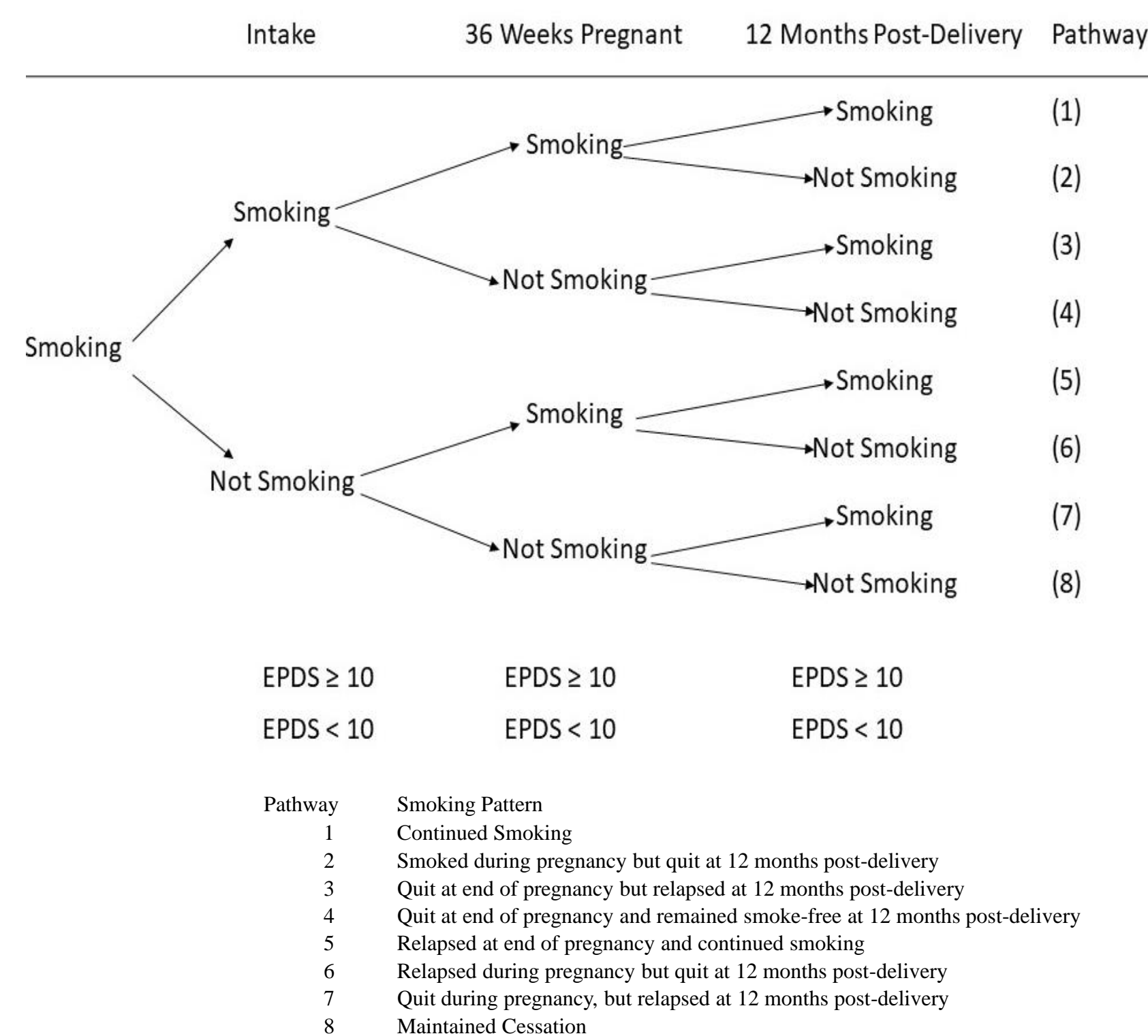
Smoking during and after pregnancy has negative health consequences for a mother who smokes as well as health and development of the child. Previous research has indicated behavioral interventions increase prenatal smoking cessation;¹ smoking relapse during postpartum, however, remains high especially among women with lower incomes.²

Depression is associated with smoking³ and lower levels of self-mastery.⁴ Self-mastery increases enactment of health behaviors.⁵ Little prior research has addressed changes in smoking during pregnancy and postpartum throughout the child's first year of life.

Purpose: This study examines postpartum smoking cessation and its related factors.

AIMS

1. Examine patterns of smoking status and its correlation with depression throughout pregnancy and up to 12 months postpartum among women with a history of smoking prior to pregnancy.
2. Test whether self-mastery moderates the effects of background variables (*demographics, smoking history, and depressive symptoms*) assessed at pregnancy intake on smoking status at end of pregnancy and 12 months post-delivery



METHODS

Design:

- Longitudinal Secondary Data Analysis
- Data from a national evidence-based home visitation program, 2010-2016

Inclusion Criteria:

- Singleton Births
- No previous live births
- Enrolled prior to 28 weeks gestation
- Participation in program for at least 12 months after birth
- Income eligibility (e.g. Medicaid eligible)
- Living within a service area

Data Collection and Measures:

(Completed by trained Nurse Home Visitors)

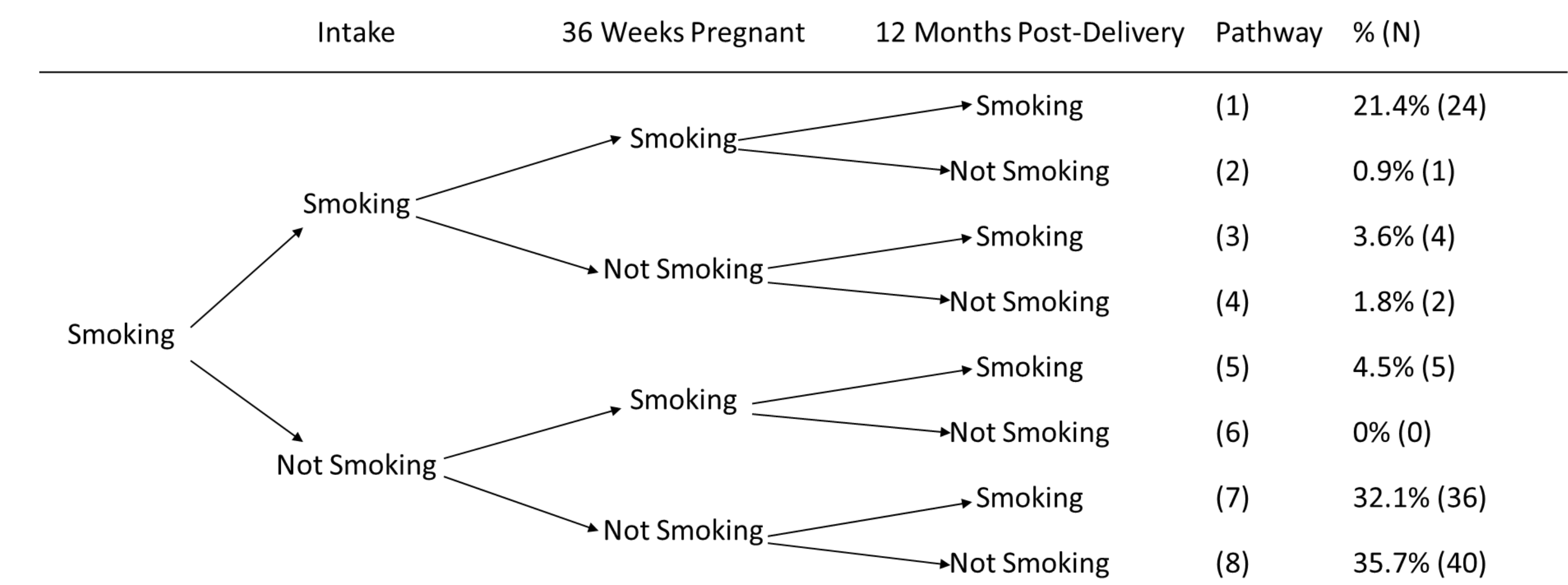
- **Demographics:** Program data forms to collect such data at intake.
- **Smoking:** Number of cigarettes smoked in the previous 48 hours assessed at: (1) program intake (0-28 weeks gestation), (2) 36 weeks gestation, and (3) 12 months post-delivery.
- **Depression:** Edinburgh Postnatal Depression Scale to indicate possible depression. Collected at intake, 36 weeks of gestation and 12 months post-delivery
- **Self-mastery:** Pearlin Mastery Scale to measure level of mastery, or the belief that a person is in control of life's circumstances. Collected at intake.

Analysis Plan:

- Regression models
- Structural equation modeling
- Correlation and Chi-square tests

PRELIMINARY FINDINGS

Results of this study will identify patterns of smoking relapse (aim #1), and identify predictive factors associated with smoking cessation at the end of pregnancy and at 12 months post-delivery (aim #2). Aim 1 preliminary analysis was completed with a local subset of the national data set (n=112).



PRELIMINARY CONCLUSIONS

It is too early in data analysis to draw any conclusions, but this study will provide a foundation for future research regarding development of effective interventions to support smoking cessation and maintenance specific to the population of pregnant and postpartum women, by identifying possible correlations and predictive variables for women being smoke-free postpartum.

REFERENCES

1. Patnode, C.D., Henderson, J.T., Thompson, J.H., Senger, C.A., Fortmann, S.P., & Whitlock, E.P. (2015). Behavioral counseling and pharmacotherapy interventions for tobacco cessation in adults, including pregnant women: A review of reviews for the U.S. Preventative Services Task Force. *Annals of Internal Medicine*, 163(8), 608-621.
2. Healthy People 2020 [Internet]. Washington, DC: U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Retrieved from <https://www.healthypeople.gov/2020/data-search/Search-the-Data#objid=4854>;
3. Mendelsohn, C. (2012). Smoking and depression: A review. *Australian Family Physician*, 41(5), 304-307.
4. Marshall, G.N., & Lang, E.L. (1990). Optimism, self-mastery, and symptoms of depression in women professionals. *Journal of Personality and Social Psychology*, 59(1), 132-139.
5. DeSocio, J., Harriet, K., & Cole, R. (2003). Testing the relationship between self-agency and enactment of health behaviors. *Research in Nursing & Health*, 26(1), 20-29.

ACKNOWLEDGEMENT

Supported in part by the **Robert Wood Johnson Foundation Future of Nursing Scholars** and the **Ruth Deter Scholarship** through Indiana University School of Nursing.

