ASHES, Vol. 13(13) – Smoking for two? Quit intentions and attempts during pregnancy

December 20, 2017

In 2014, over eight percent of women who gave birth in the United States smoked cigarettes during pregnancy. In addition to the harm that smoking does to a person's body in general, smoking during pregnancy is also associated with a number of negative health outcomes and even death for the infant. Not surprisingly, many women who smoke consider quitting when they become pregnant. However, we need to learn more about how women's intentions and attempts to quit smoking evolve throughout the course of pregnancy. This week, ASHES reviews a British study by Dr. Sue Cooper and her colleagues that investigates this question.

What was the research question?

How do women's intentions and attempts to quit smoking change throughout pregnancy?

What did the researchers do?

850 women from two hospitals in Nottingham, England, participated in the study. These women were between 8-26 weeks pregnant when the study began, at least 16 years old, and either smoked currently or had smoked within 3 months of becoming pregnant. Participants completed surveys at baseline, during late pregnancy, and three months after having given birth. These surveys asked about their current smoking habits and urges, as well as their intentions and attempts to quit smoking.

What did they find?

Rates of smoking did not change over the course of the study. In fact, the percentage of women who intended to quit smoking significantly decreased from baseline to late pregnancy to three months postpartum (see Figure 1). The researchers also observed that women who had quit smoking in the three months prior to becoming pregnant were less likely to be smoking again after having given birth compared to women who had first quit smoking during their pregnancy.

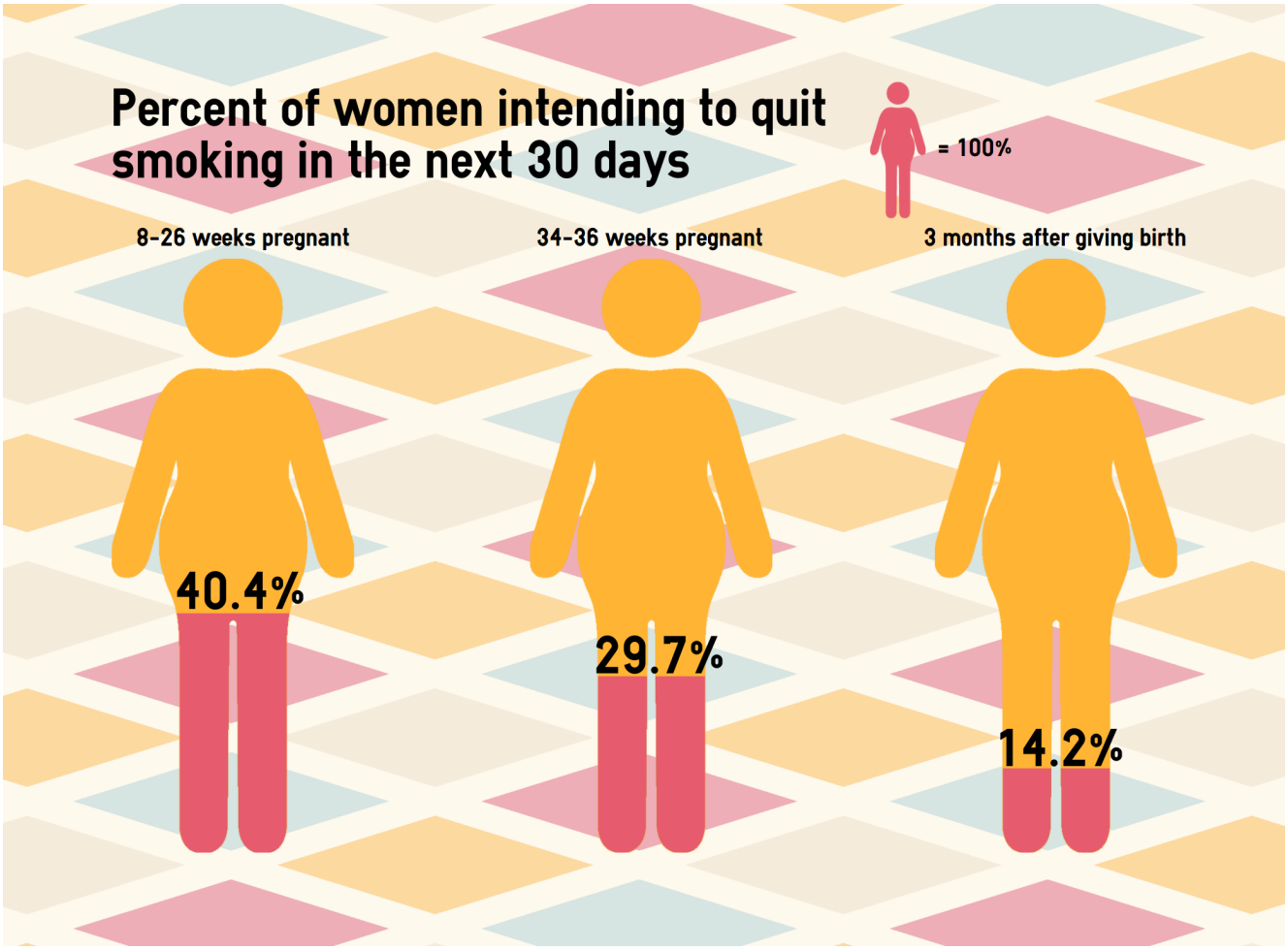

Figure. The pink portion of each figure illustrates the percentage of women at each point during and after pregnancy who said they intended to quit smoking in the next 30 days. The more pink the figure, the more women had intentions to quit. Note that the rate of women smoking did not actually decrease during pregnancy or three months afterwards. Click image to enlarge.

Why do these findings matter?

These findings suggest that it might be more effective for healthcare providers to discuss quitting smoking with women while they are planning to become pregnant or early on during a pregnancy. Women who are further along in their pregnancy seem to be less interested in quitting, perhaps due to prior failed quit attempts or because they anticipate the end of their pregnancies and (falsely) see less need to quit. Future research could determine if other interventions, such as providing motivational interviewing or education about second-hand smoking, would be effective for these women.

Every study has limitations. What are the limitations in this study?

Less than half of the women in the study completed all three questionnaires. This leaves open the chance that systematic non-response bias might affect the

findings of this study if the women who did not complete the follow-up questionnaires were different on some characteristics as a group from the women who did complete the study. The range of 8-26 weeks that the researchers set for baseline is extremely wide. Some women did not complete a baseline assessment until well into their pregnancies.

For more information:
Smokefree.gov has information, tools, and resources for people who currently smoke or who have already quit. Smokefree Women in particular is tailored for both pregnant and nonpregnant women. Healthcare providers can refer to this list of Tobacco Use and Pregnancy Resources by the CDC. For additional tools, please visit the BASIS Addiction Resources page.

— Rhiannon Chou Wiley

What do you think? Please use the comment link below to provide feedback on this article.