

Dr Radha Shukla, Dr Mona Kanaan, Prof. Kamran Siddiqi, Dr Anne Readshaw, Prof. Linda Bauld, Dr Romaina Iqbal

radha.shukla@york.ac.uk
@ShuklaRadha

Objectives:

1. Prevalence estimates for all three types of tobacco use among women of reproductive age stratified by region.
2. Regression analysis to explore the effect of residence, education, socio-economic status and age on use of tobacco.
3. Regression analysis to compare odds of low birth weight in relation to tobacco use among women who have had a live birth in the past 2 years.

- Prevalence estimates significantly vary based on location and type of tobacco use (cigarette smoking, non-cigarette smoking and smokeless tobacco).
- Non-cigarette tobacco more prevalent in DG Khan division of Punjab while smokeless tobacco (ST) use more prevalent in Hyderabad division of Sindh.
- Inverse relationship of education and wealth index with tobacco use (all three forms).
- Despite the large survey data set, only 15% of the live births in past 2 years had recorded birthweights. Major challenge in estimating the association of tobacco use and low birth weight (LBW) is lack of data.

| Odds of LBW in relation to cigarette smoking | | |
|--|-------------|-------------|
| Observations | Odds ratios | 95% CI |
| 71 | 2.4 | 0.71 - 8.03 |
| Constant | 0.22 | 0.11 - 0.45 |
| * p value less than 0.05 | | |
| Odds of LBW in relation to non-cigarette smoking | | |
| Observations | Odds ratios | 95% CI |
| 70 | 1.88 | 0.62 - 5.65 |
| Constant | 0.29 | 0.11 - 0.71 |
| * p value less than 0.05 | | |
| Odds of LBW in relation to ST use | | |
| Observations | Odds ratios | 95% CI |
| 156 | 0.22* | 0.1 - 0.5 |
| Constant | 0.8 | 0.41 - 1.54 |
| * p value less than 0.05 | | |

Despite the large sample and the objective of the survey to collect maternal and child health data, only about 15% of the women who had a live birth in past two years had recorded birthweights. Hence, relatively few observations for the regression analysis. **Hence one of the main challenges in estimating the association of LBW and tobacco use is lack of data.**

Data:

- The MICS data is collected by UNICEF on maternal and child health for two provinces of Pakistan; Punjab and Sindh (70% of Pakistan's population, 2017).
- Punjab (2017) : **74011 women** (15656 women had one or more live births in past 2 years). Sindh (2014) : **26647 women** (6095 women had one or more live births in past 2 years).

Results:

- Percentage of ever tobacco users, currently using tobacco ranges from 20%-95%.
- Odds of tobacco use is significantly lower for women with secondary and higher education.
- With each increase in wealth quintile, tobacco use decreases
- Women in rural areas are 39% less likely to use ST.

