

Tobacco use among pregnant women in 42 low and middle-income countries (LMICs) and sub-group analysis of South East Asia region (SEAR) and Africa: secondary data analysis from the Demographic and Health Surveys (DHS).

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No conflict of interest

INTRO

Need for recent prevalence rates among pregnant women from LMICs and how it differs from those who are not pregnant.

METHODS

1. DHS data from 42 LMICs (2010-2016)
2. Pregnant vs non-pregnant women
3. Prevalence estimates
4. Multinomial logistic regression analysis

RESULTS

Pooled prevalence (42 LMICs) of tobacco use among pregnant women	
Exclusive smoking	0.69% (95% CI of 0.51-0.90)
Exclusive ST use	0.56% (95% CI of 0.33-0.84)
Dual tobacco use	0.03% (95% CI of 0.01-0.06)

Pooled prevalence (42 LMICs) of tobacco use among non-pregnant women	
Exclusive smoking	1.09% (95% CI of 0.81-1.42)
Exclusive ST use	0.78% (95% CI of 0.35-1.37)
Dual tobacco use	0.08% (95% CI of 0.05-0.11)

- The prevalence does not statistically differ among pregnant women when compared to non-pregnant women.
- In SEAR, smokeless tobacco use is about 7% more among pregnant women.
- Inverse relationship of tobacco use with wealth index.

DISCUSSION

Important to intervene and increase awareness for pregnant women regarding tobacco use and focus more on women from low socio-economic status as they bear the greatest burden.

In LMICs, tobacco use does not seem to differ between pregnant and non-pregnant women.

In fact, smokeless tobacco use is 7% more likely during pregnancy in South East Asia.

Multinomial logistic regression - 42 LMICs			
Dependent variable: tobacco use	RRR	95 % CI	
None		Base Outcome	
Exclusive smoking			
Pregnant (ref=no)			
Yes	0.85	0.67-1.09	
Wealth index (ref=poorest)			
Poorer	* 0.65	0.59-0.71	
Middle	* 0.47	0.39-0.57	
Richer	* 0.39	0.28-0.48	
Richest	* 0.26	0.18-0.39	
Exclusive Smokeless			
Pregnant (ref=no)			
Yes	0.81	0.665-0.998	
Wealth index (ref=poorest)			
Poorer	1.01	0.90-1.13	
Middle	* 0.76	0.68-0.85	
Richer	* 0.51	0.45-0.59	
Richest	* 0.24	0.19-0.29	
* P-values less than 0.05 Adjusted for type of residence, education and age			

Multinomial logistic regression - SEAR			
Dependent variable: tobacco use	RRR	95 % CI	
None		Base Outcome	
Exclusive smoking			
Pregnant (ref=no)			
Yes	0.88	0.73-1.05	
Wealth index (ref=poorest)			
Poorer	* 0.6	0.55-0.65	
Middle	* 0.4	0.36-0.45	
Richer	* 0.3	0.25-0.37	
Richest	* 0.18	0.13-0.25	
Exclusive Smokeless			
Pregnant (ref=no)			
Yes	* 1.07	1.02-1.12	
Wealth index (ref=poorest)			
Poorer	1.08	0.96-1.2	
Middle	* 0.81	0.67-0.99	
Richer	* 0.55	0.41-0.75	
Richest	* 0.28	0.18-0.42	
* P-values less than 0.05 Adjusted for type of residence, education and age			

Multinomial logistic regression - Africa			
Dependent variable: tobacco use	RRR	95 % CI	
None		Base Outcome	
Exclusive smoking			
Pregnant (ref=no)			
Yes	0.77	0.63-0.95	
Wealth index (ref=poorest)			
Poorer	* 0.77	0.61-0.99	
Middle	* 0.55	0.37-0.81	
Richer	* 0.51	0.28-0.91	
Richest	* 0.36	0.18-0.71	
Exclusive Smokeless			
Pregnant (ref=no)			
Yes	0.88	0.76-1.03	
Wealth index (ref=poorest)			
Poorer	* 0.57	0.42-0.77	
Middle	* 0.44	0.30-0.65	
Richer	* 0.33	0.21-0.50	
Richest	* 0.19	0.11-0.32	
* P-values less than 0.05 Adjusted for type of residence, education and age			

