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Factors associated with tobacco use prior to pregnancy among women in nine developing countries

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Global Network

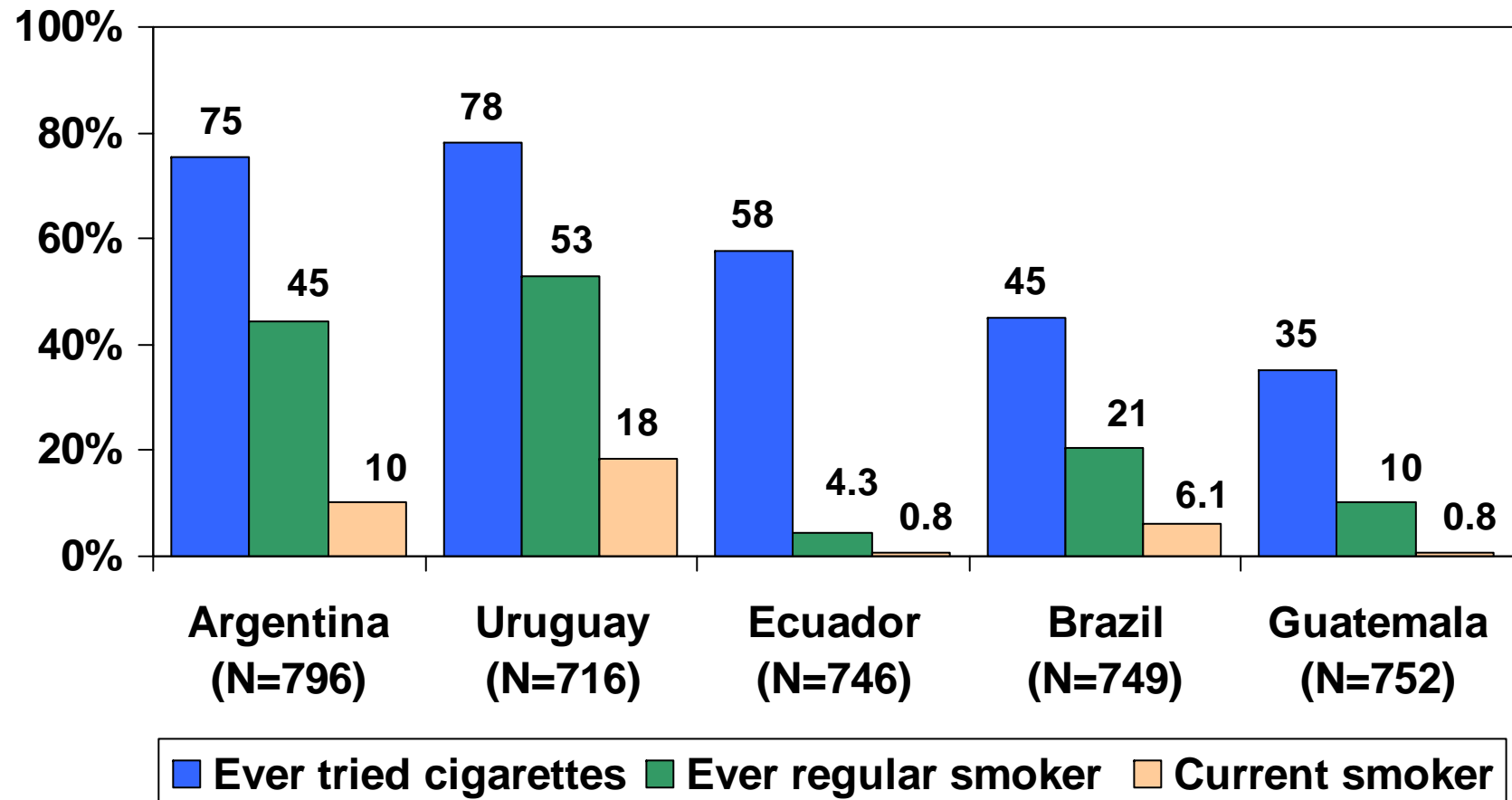
for Women's and Children's Health Research



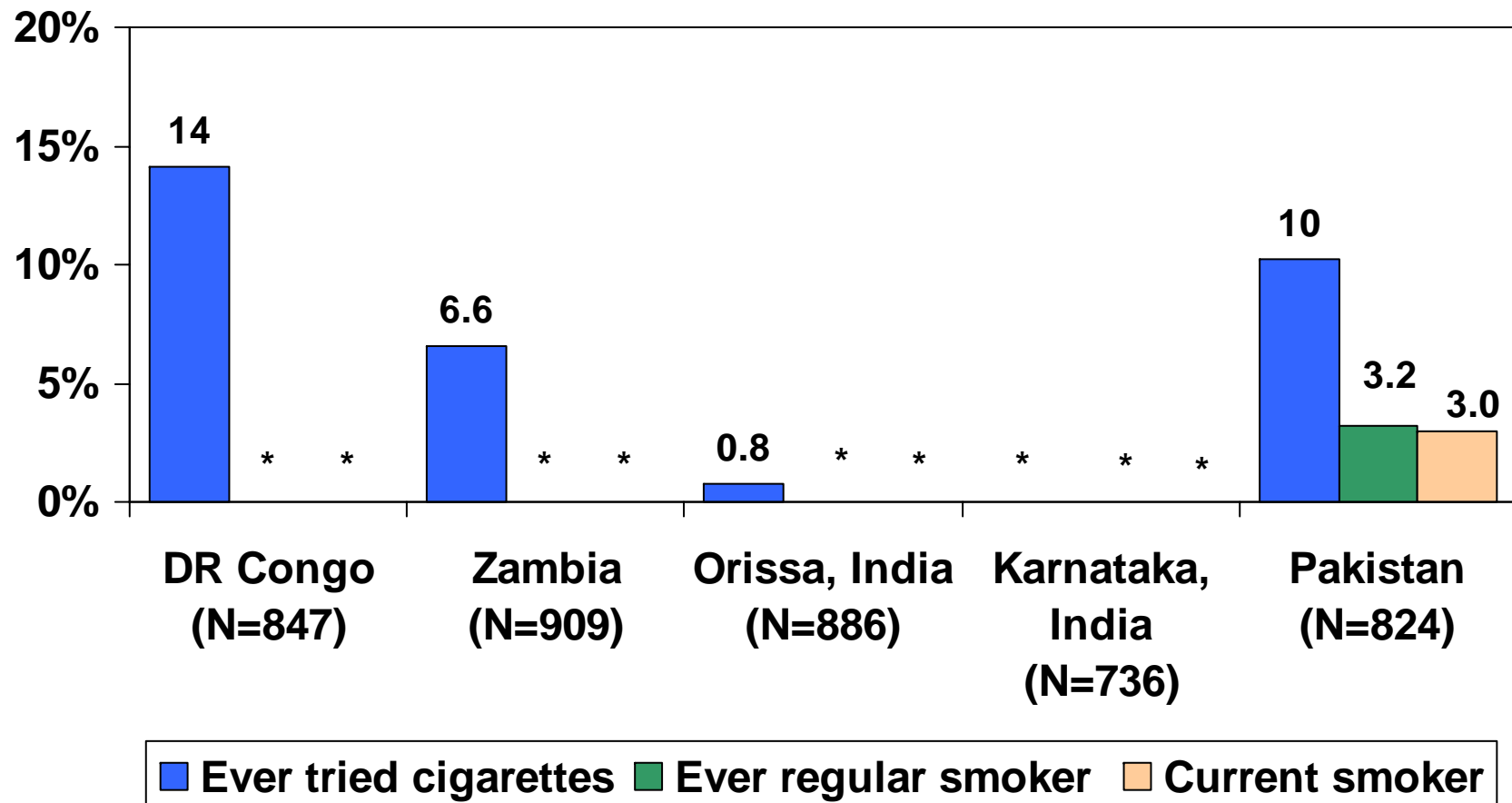
Methods

- Objective: Understand the knowledge, attitudes and behaviors regarding tobacco use and ETS exposure of pregnant women in GN countries.
- 20- to 40-minute, face-to-face interview.
- Conducted in most common language(s) spoken at the site.
- Survey conducted November 2004 – September 2005.
- Study population included pregnant women identified in hospitals and clinics providing prenatal care
 - 18-46 years of age
 - Past first trimester of pregnancy
- Convenience sample of >700 pregnant women at each site (total sample 7,961).
- Secondary analysis of the GN dataset to examine associations between prior tobacco use and selected variables

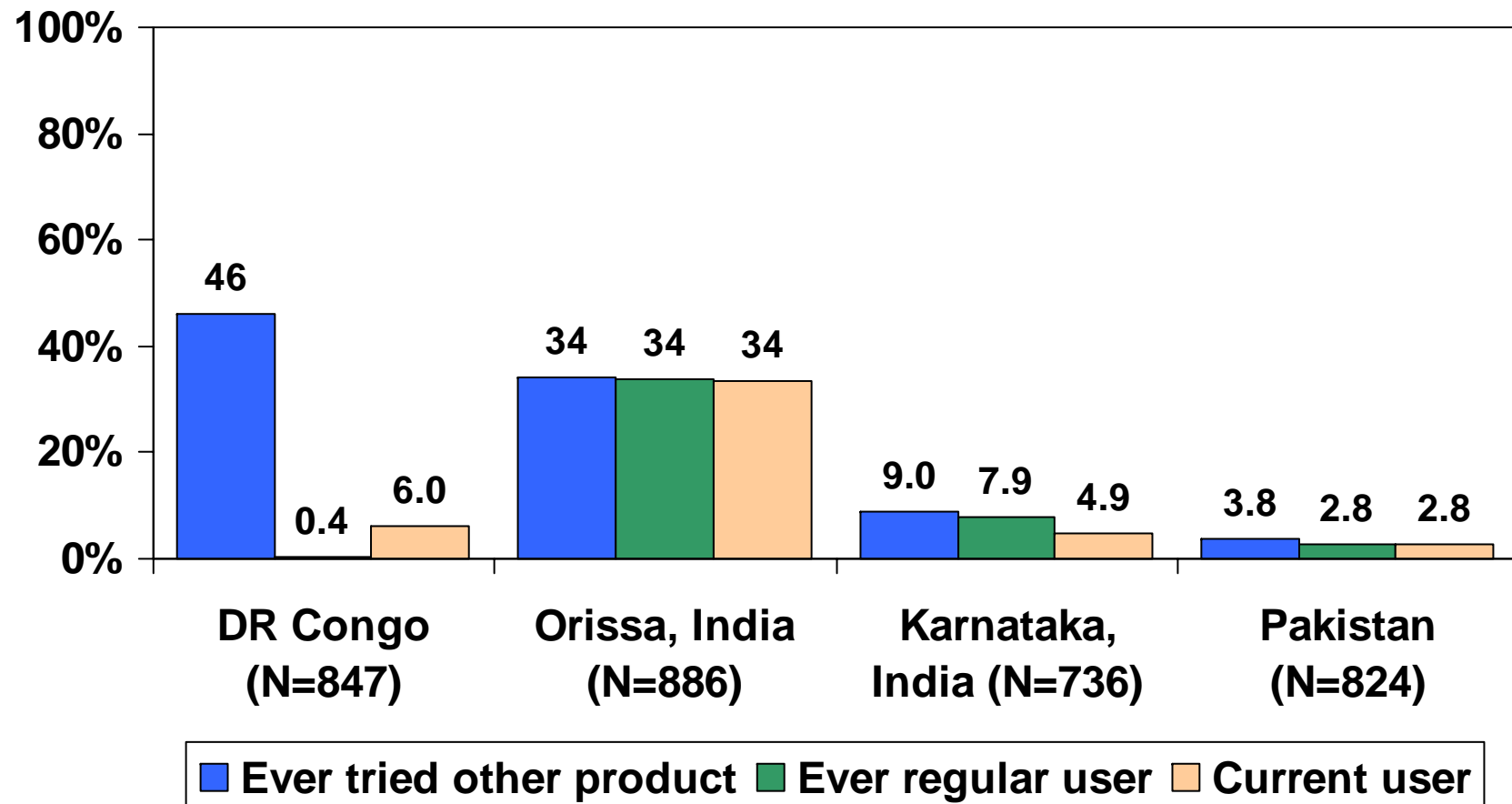
Cigarette Use at Latin American Sites



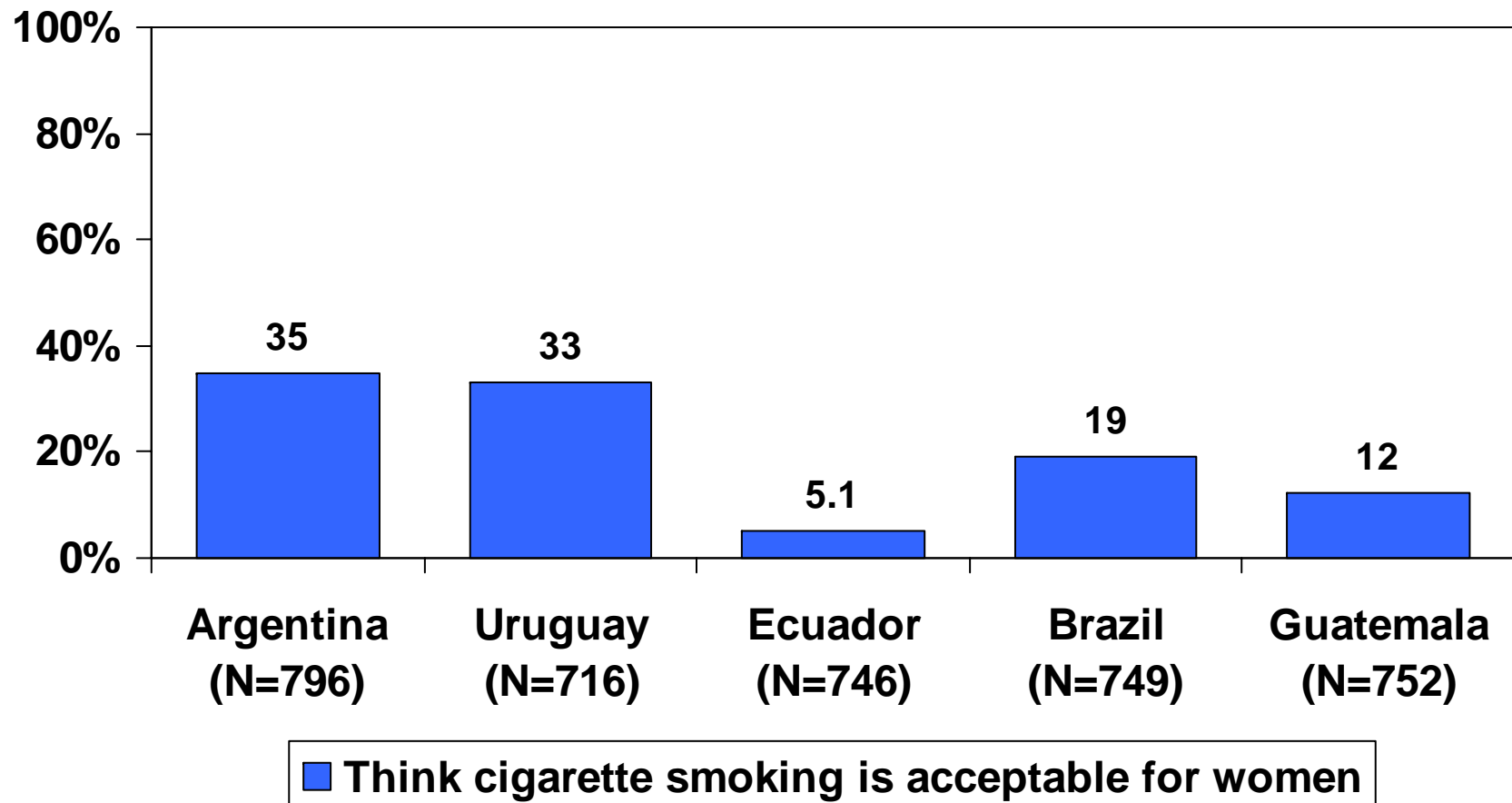
Cigarette Use at African/Asian Sites



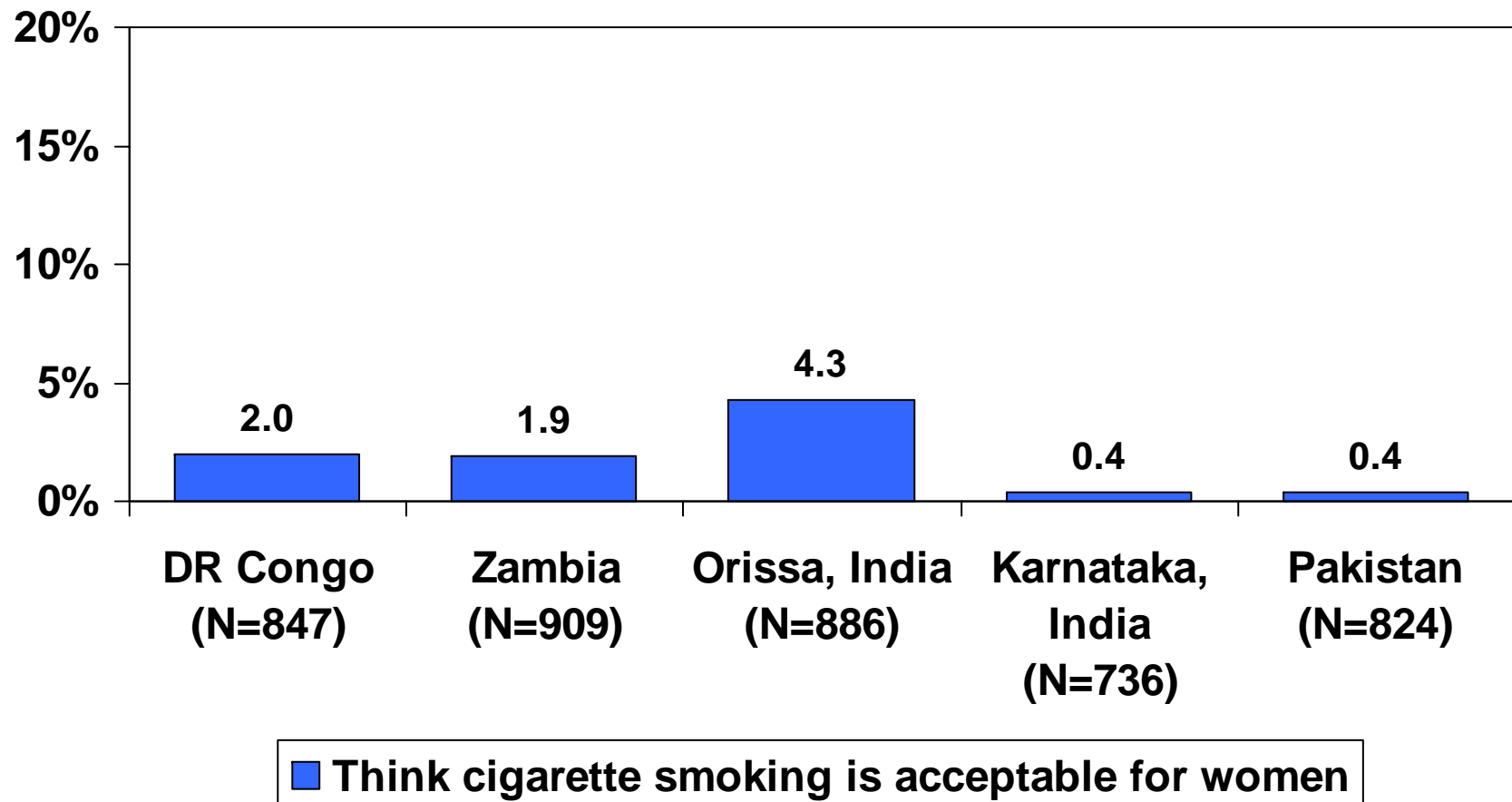
Use of Other Tobacco Products



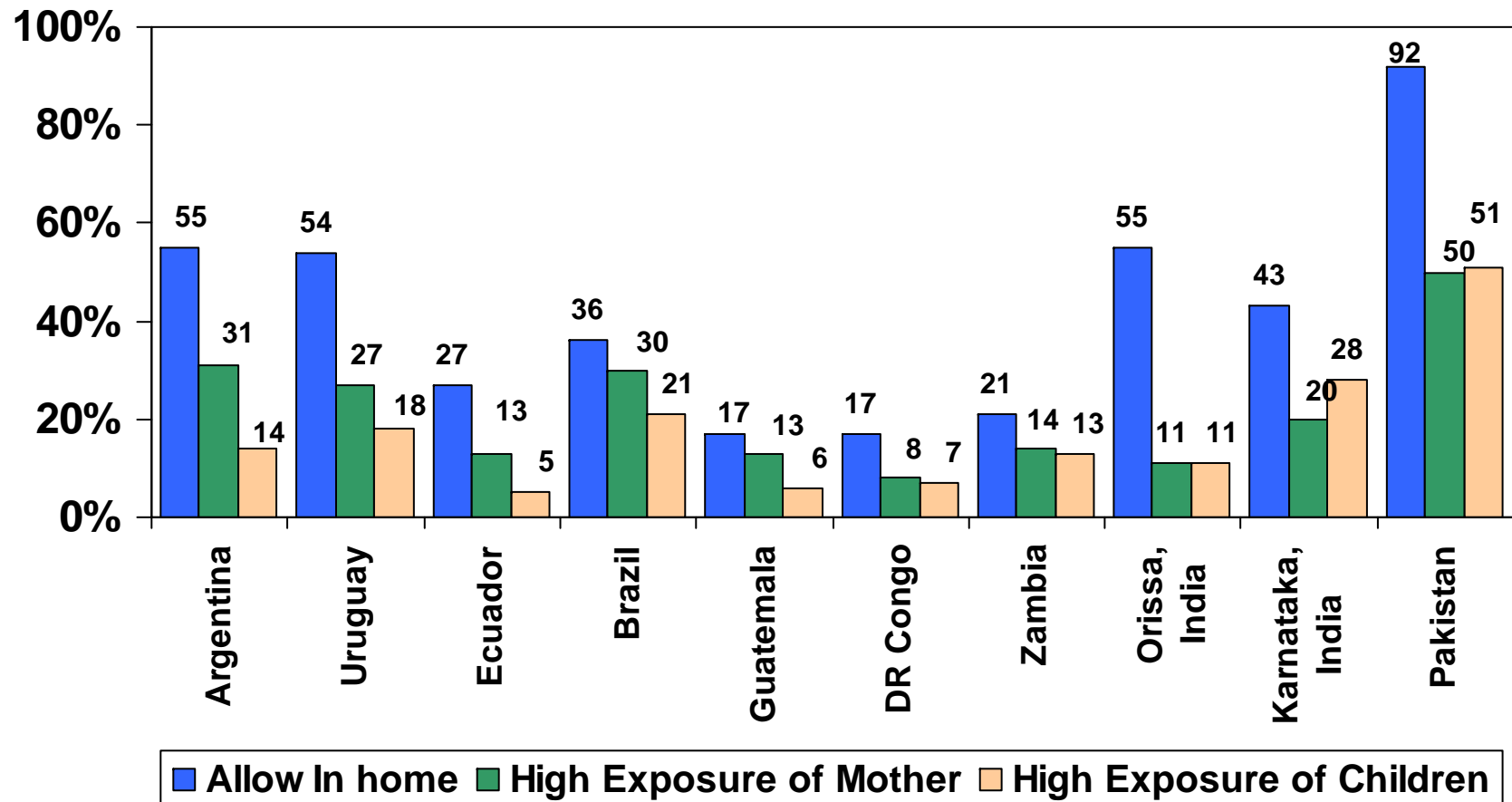
Attitudes toward cigarette smoking in Latin American sites



Attitudes toward cigarette smoking in African/Asian sites



ETS Exposure of Mother/Young Children



Variables examined

Socio-demographic	<ul style="list-style-type: none"> ▪ age ▪ years of education and literacy ▪ residence (urban/semi-urban/rural) ▪ work for pay ▪ number of household members ▪ socio-economic status
ETS exposure	<ul style="list-style-type: none"> ▪ how often respondents reported being indoors and around people who are smoking cigarettes or other tobacco products (rarely/never, sometimes, frequently, always) ▪ smoking of tobacco products allowed in the home
Attitudes regarding tobacco use	<ul style="list-style-type: none"> ▪ think cigarette smoking is acceptable for women ▪ think the use of other tobacco products is acceptable for women
Exposure to marketing	<ul style="list-style-type: none"> ▪ seen/heard advertising <u>FOR</u> tobacco products in last 30 days ▪ seen/heard advertising <u>AGAINST</u> tobacco products in last 30 days
Knowledge of risks of tobacco use	<ul style="list-style-type: none"> ▪ knowledge score regarding risks of tobacco use and ETS exposure for the mother and child
Other tobacco related questions	<ul style="list-style-type: none"> ▪ household member involved with tobacco work ▪ live with one or more tobacco users

Statistical analyses

- Logistic models generated for each individual study site using *ever tried tobacco products* and *ever a regular user of tobacco products* as the dependent variables.
- Backward selection with type I error (alpha) of 0.05 was employed to determine associations with the selected variables. R-squares were calculated for each model.
- Based upon the results of models generated for *ever tried tobacco products*, variables associated with ever tried tobacco products that were common in at least 3 countries were included in logistic models for each site.
- Odds ratios and p-values were calculated.

Associations with ever tried cigarette smoking or other products (Odds Ratios)

Variable	Argentina	Uruguay	Ecuador	Brazil	Guatemala	DR Congo	Zambia	Orissa, India	Karnataka, India	Pakistan
Live with tobacco users	1.6	1.2	1.4	1.6	1.8	2.2	1.1	2.4	0.7	1.9
High ETS exposure	2.6	2.9	2.1	1.8	2.4	0.5	3.3	2.8	1.5	4.3
Acceptability of cigarette or other tobacco use	1.5	2.4	1.9	1.4	2.1	1.5	2.9	1.8	1.2	0.0
Education	0.4	1.3	0.8	1.4	0.6	0.6	0.9	5.1	4.2	1.9

Associations with ever a regular user of cigarettes or other tobacco products (Odds Ratios)

Variable	Argentina	Uruguay	Ecuador	Brazil	Guatemala	DR Congo	Zambia	Orissa, India	Karnataka, India	Pakistan
Live with tobacco users	1.9	1.9	0.7	1.9	1.9	-	-	2.5	0.6	-
High ETS exposure	2.4	2.2	2.0	2.1	3.2	-	-	3.0	1.8	-
Acceptability of cigarette or other tobacco use	2.4	2.7	2.1	1.7	2.7	-	-	1.7	1.3	-
Education	0.3	0.8	0.5	2.2	0.6	-	-	5.4	5.0	-

Discussion

- Data suggest pregnant women's cigarette smoking is a current or emerging problem in the five L.A. sites surveyed, and smokeless tobacco is a problem at the two sites in Indian.
- ETS exposure of pregnant women and young children is common and often heavy across all sites.
- Preliminary findings suggest women with a history of prior tobacco use (experimentation or regular use) are more likely to live in environments with increased potential of ETS exposure and have more favorable attitudes toward the acceptability of use.

Limitations

- Data collected by self-report
- Convenience sample
- Sample limited to pregnant women between ages of 18-46
- Time limitation for correlating variables with prior use
- Small tobacco use numbers limited analyses

Conclusion

- Tobacco use by pregnant women threatens ongoing efforts to improve maternal and child health outcomes in developing countries.
- Crucial to put in place surveillance and interventions (policy and program) to impact tobacco use/ETS exposure of pregnant and reproductive age women.
- Necessary to implement strategies to prevent experimentation and use by girls and young women to promote a tobacco free environment for pregnancy and childrearing.

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