

## **Low Maternal Nutritional Status in Bangladesh: Solid Fuels and Rural Residence Matter but NGO Membership Does Not**

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### **Abstract**

It has long been recognized that maternal nutritional status is quite low in the developing world. However little is known about the socio-demographic determinants of this situation. This study uses a large nationally representative dataset from Bangladesh (Bangladesh Demographic and Health Survey—2004) to explore the socio-demographic determinants of low maternal BMI. The analysis (binary logistic regression adjusting for clustering) shows that a number of factors in a fully adjusted model increase the risk of low maternal BMI (BMI <18). Some of the results are intuitive: more interestingly the use of solid fuels for cooking (a marker of environmental pollution) remains the biggest predictor of low maternal BMI [OR: 2.21; 95% C.I. (1.628---2.999)]. Other results are household poverty defined here as being in the bottom 60% of household [OR: 1.67; 95% C.I. (1.457---1.921)], lower level of education [OR: 1.34; C.I. (1.167—1.540)] and higher age of respondents [OR: 1.3; C.I. (1.091—1.56)] are also remains the important risk factor of low BMI. This warrants further exploration as does the rural residence disadvantage [OR: 1.26; 95% C.I. (1.034---1.545)]. In a cumulative sense, each additional birth significantly lowers maternal BMI [OR: 1.07; 95% C.I. (1.046---1.099)] underscoring the need for lower numbers of births. Finally it is particularly interesting to note that NGO membership status which is often proclaimed as being beneficial to maternal health and nutrition has no statistically significant impact on maternal nutritional status in this study [OR: 0.94; 95% C.I. (0.84---1.05)]. These results suggest that much more attention needs to be placed on reducing the use of solid fuels for cooking, reducing household poverty, increasing rural nutritional resources and increasing family planning services.

### **Participant and Affiliation:**