

Community Based Prospective Study of Miscarriages in Context of Biomass Fuel Use by Tribal Women of Rural Remote Region

Shakuntala Chhabra¹ and Vikas Rathod¹

¹Mahatma Gandhi Institute of Medical Sciences

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Abstract

OBJECTIVE Community based prospective study was carried out to know about the occurrence of miscarriages in context of Biomass fuel use by rural tribal, pregnant women. **DESIGN** Cross-sectional analysis. **SETTING** Villages and Dr. Sushila Nayar Hospital, Utavali, Melghat, Amravati Maharashtra. **POPULATION** Study in 100 villages, all pregnancies included. **METHODS** After approval of the institute's ethics committee, study was conducted in 100 villages. After base information, villages were divided into 50 study, 50 controls, subdivided into 40 study villages with advocacy for protection from ill effects of Biomass fuel, 40 non-advocacy controls and 10 study villages where in addition to advocacy Chimneys were fixed on roofs of huts with no windows, for exit of smoke and 10 controls where neither advocacy was done nor Chimneys were fixed. **MAIN OUTCOME MEASURES** Change in occurrence of miscarriage with Biomass fuel use. **RESULTS** In 50 study villages, of 1005 pregnancies, 2.8% reported miscarriages and in 50 controls, of 1097 pregnancies 3.1% had miscarriage. Of 2700 pregnancies in 40 Advocacy study villages 6.6%, of 40 controls of 2700 pregnancies, 10.5% had miscarriages. In 10 villages with Advocacy as well as Chimneys, of 700 pregnancies, 2.4% had miscarriages in 10 controls, of 700 pregnancies 5.6% ended in miscarriages. In first year it could have been underreporting. **CONCLUSION** In rural tribal women miscarriages were not more than globally known, but Biomass fuel did affect occurrence of miscarriages.

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