

Abstract

To assess the energy requirement of young adolescence girls and women inhabiting tribal belt of Chhattisgarh - A pilot study

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Background – There is an acute dearth of published data on the energy requirement of young girls and women living in the remote tribal area of Chhattisgarh. The baseline data is expected to assist the public health experts and community leaders to assess the nutritional need and design the nutritional intervention plan for the targeted population. The gender based study is aimed at improving the perinatal outcome and reduce low birth weight babies in the community.

Methods: - A community based cross sectional small pilot study was conducted amongst 90 randomly selected young girls and women between the ages of 11 to 60 years, between Jan to March 2015 by 24 hrs dietary recall methods. SPSS 21 version was used as a statistical tool for analysis.

Results – Mean energy intake was 1615 Kcal +- which is same as the national average (1624Kcal average for bottommost quartile of per capita expenditure in rural India –NFHS-3 survey). 18/88 (20 %) consumed more than 1900 kcal daily though the calculated RDA is 2060 kcal for rural women. We did not find obesity amongst them or in their community (BMI 41% underweight and 52 % normal range all below <25). We also did not find any correlation between expenditure, intake and BMI. Thus BMI is an independent variable in tribal poor population. Mean energy expenditure was 3108 Kcal. Mean iron intake was 9.45 mg, salt intake was 7.15gm while oil intake was 10.16 gm per head.

Conclusion – Energy expenditure amongst the young girls and the women were found to be significantly more than their intake. It is well known that in tribal culture, women are normally engaged in more strenuous and manual work/job I,e, walking long distance to carry water and fuel or work in the field as compared to men. We are now working with SHG and community resource persons to find out most affordable and economical ways to raise their energy intake as well as reduce their energy expenditure i.e., by limiting or finding alternative methods to cut down on their daily unwanted and unnecessary activities. We believe that our innovative ways will help reduce economic and disease burden in the community.

*** Research Fellow (PH) will present the paper. The research work is part of a joint VTH-Tata Trust initiative.**