EFFECT OF WOMENS' NUTRITIONAL TRANSITION ON INFANT SURVIVAL IN INDIA
: A TWO STATE LOGIT MODEL ANALYSIS

Extended Abstract:

Food habits are the ways in which individuals or groups of persons respond to social and cultural pressures, choose and consume and make use of available foods (Mcad, 1962).As populations becomes more westernized, dietary compositions changes to include more saturated fats and less fibre. Although this leads to dense diets, the actual energy intake may not be greater which increases womens' susceptibility to anaemia and becoming underweight and lead to abortion and still birth etc.

According to De Garoin (1969); urban food habit depends first upon transnational habits at home and second on new influences, for instance, eating out in workers canteen. According to Popkin (1996); an urban population has a distinctly different diet from rural population. Urban diet include superior grains, more milled and polished grains, higher fat content, more animal products, more sugar and more prepared and processed food. Where nutritional transition occurs, the impacts are usually seen at first among affluent than lower income groups (Delpeuch and Mary, 1997).The growing popularity of fast food culture is just one of many cultural changes that have been brought by globalization. Vioque, Tores and Quiles (2000) suggested the rising trend of obesity to such factors as low levels of physical activity, high calorie intake and long hours of television watching which are life style correlates. Also there are socio-economic and genetic factors affecting nutritional transition among urban women which affect the infant survival.

In this context, we analyze National Family Health Survey (1998-99) (NFHS) data of India to understand the effects of socio-economic and other selected nutritional transitional factors on Infant Survival for Indian Urban Women. We select the explanatory variables: Dietary (Veg, Non-Veg) (A), Life style (Professional and Not Working) (B), Other life style (watching T.V. and less physical activity) (C), Institutional Pregnancy care (Ante natal and natal care and delivery care) (D), Breastfeeding (E), General Health Condition (Obesity and anaemia) (F) and educational status(primary and more than primary) (G) and dependent variable as infant survival (X).

We construct a two stage Logit Model and apply to NHFS data. First web generate a 2^8 cross-classified table of selected categorical variables and perform log-linear analysis for best model selection inn terms of parsimoniousness, goodness of fit and amount of information model could offer. We select the initial model by Brown Screening Technique and at the second stage by standard stepwise procedure. We also considered Akaike Information Criterion for Model Selection. The Multistage

Logistic analysis thus performed is analogous to path analysis giving out path coefficient and we compute higher order interactions to understand the mechanism and paths to infant survival with reference to interactions of nutritional transition variables. As to the causal ordering, we considered that infant survival was preceded by dietary transition and institutional delivery care which in turn was preceded by the rest of variables. Analytically, this is equivalent to a two-stage log-linear analysis, first analyzing on a 2^7 cross-classified table collapsing over variable of dietary practice and then on the full table. After the log-linear analysis is performed for the appropriate model, presentation of causal relationship in terms of logistic regression gives path coefficient. The Logit parameter helped in evaluating the strength and direction pathways. The best model selected at the first stage is (A,B,D,E,F,G) and at second stage (B,C,D,F,G) and infant survival is operating through the variable of dietary intake, life style and institutional care correlates.

The study suggest that an overemphasis by policy and population program managers needs serious attention nutritional supplement of the pregnant women but infant survival can be raised by considering womens; nutrient intake value in the era of globalization of the food culture. In this context, woman's life style, dietary intake, institutional pregnancy care, socio-economic status and obesity are important factors which can be considered in the intervention strategy models of interactions of infant survival by improving womens' nutritional status in transitional food culture of India with the increasing urbanization in India. Though it provides a way to improve infant survival in transitional urban food culture, it also poses a threat to developing economy of India for arranging right informatory and nutritional resources where a large section of pregnant women give birth in perpetual anaemic condition.

References:

1. De Garine,I (1969):Food, Nutrition and Urbanization; FAO Newsletter, 7(1):1-19
2. Delpeuch, F and Marie, B (1997):The Nutrition Transition: New trends in the Global Diet, Nutrition Review ,55(2):31-48
3. Delpeuch, F and Marie, B (1997):Obesity and Developing Countries of South; Medicine Tropicale (Mars) ;55:380-88
4. Drewnowski, A and Popkin, B.M. (1997): The Nutrition Transition: New trends in Global Diet, Nutrition Review ;55(2):31-43
5. Griffiths, P.L. and Bentley (2001): The Nutrition Transition is Underway in India, Nutrition, 131(10): 2692-2700
6. International Institute for Population Sciences (IIPS) (1998-99):National Family Health Survey; Mumbai

7. Popkin. B.M. (1996):Understanding the Nutrition Transition; Urbanization and Health Newsletter, Sep (30):3-9