

## 3<sup>rd</sup> Indo-Global Summit & Expo on **Healthcare**

October 05-07, 2015 New Delhi, India

### **Effect of home based child care & nutrition improvement program on child mortality and malnutrition in a tribal belt: Result of field randomized control trial**

**Ashish Satav**

MAHAN TRUST, Mahatma Gandhi Institute of Medical Sciences, India

**Background:** In tribal part of India, most births take place in the home & most of the childhood illness is not treated properly due to scarcity of hospitals and socio-economic conditions, where high-risk care practices are common. We developed an intervention of home based child care, treatment and behaviour change communication with a focus on neonatal care and illness, infectious diseases and malnutrition of under 5 years of aged children aimed at modifying practices and reducing childhood mortality & malnutrition.

**Methods:** We did a cluster-randomised controlled field trial in Melghat, a tribal area in Maharashtra. 40 village administrative units (population 36000) were allocated to one of two groups: A control group; which received the usual services of governmental in the area, an intervention group; which received a preventive package of interventions for essential newborn care (birth preparedness, clean delivery and cord care, thermal care, breastfeeding promotion and danger sign recognition); intensive health, nutrition and hygiene education like hand washing, nail cutting, nutrition demonstration, flip chart and audio-visuals, treatment of childhood illness e.g., diarrhea, malaria, acute respiratory tract infections, neonatal sepsis & malnutrition. In the intervention clusters, village health workers delivered the packages. Outcome measures included changes in neonatal mortality rate, infant mortality rate, less than 5 years of aged children mortality rate and prevalence of severe malnutrition compared with the control group.

**Result:** There is a net reduction of 61% in still birth rate in intervention area over control area with test of significance-( $P < 0.05$ ). NMR shows 46.22% net reduction in Intervention Area over Control Area with test of significance 0.05 ( $P < 0.05$ ). There is a net reduction of 51.27% in IMR in intervention area over control area with test of significance ( $P < 0.01$ ). U5MR shows 41.64% net reduction in mortality in Intervention Area over Control Area with significance-( $P < 0.01$ ). Prevalence of severe PEM shows 50.52% net reduction in Intervention Area over Control Area with test of significance ( $P < 0.01$ ).

**Conclusion:** The study intervention resulted in statistically significant reduction in the NMR, SBR, statistically highly significant reduction in IMR, U5MR and prevalence of severe malnutrition) in intervention area. These results are replicable for reducing child mortality and malnutrition in other backward areas as it is affordable, acceptable, approachable, achievable & safe. A socio-culturally contextualised, community-based intervention, targeted at high-risk child-care practices, can lead to substantial behavioural modification and reduction in less than 5 years of aged children mortality. This study had many effects on government health policies & improved practices of people for reducing malnutrition and child deaths.

#### **Biography**

Ashis Satav is a Co-ordinator, Tribal Health Research Project, Melghat and Professor- Medicine Department Mahatma Gandhi Institute of Medical Sciences, Sevagram. He is a Regional representative of Advisor to commissioner of honourable Supreme Court.

[drsataav@rediffmail.com](mailto:drsataav@rediffmail.com)

#### **Notes:**