To Assess the Effectiveness of Various Communication Strategies for Improving Childhood Pneumonia Case Management: A Community Based Behavioural Open Labeled Trial in Rural Lucknow, Uttar Pradesh, India

SUMMARY

Background: Community Acquired Pneumonia (CAP) is the leading cause of childhood morbidity and mortality worldwide and in India. Many of these deaths can be averted by creating awareness in the community about early symptoms of CAP and by ensuring availability of round the clock, quality health care.

Hypothesis: Strengthening of public health system to provide sustainable quality care for cases of childhood pneumonia (CAP) followed by strategic dissemination of validated messages to community may improve care seeking behavior for CAP within 12 months that can be measured by 50% improved utilization of services from qualified public health care providers (over the current utilization rate of 25%).

Primary Objective 1**:** To assess the effectiveness of an innovative package of *"Community Orientation"* of doctors and ANMs and ASHAs, PLUS infrastructural strengthening by (i) providing "Pneumonia Drug Kit" (PDK) (ii) establishing "Pneumonia Management Corner" (PMC) at additional primary health center (APHC) and (iii) "Pneumonia Management Unit" (PMU) at Community health center (CHC) *ALONG* with one of the 4 different behavior change communication interventions**:**

Intervention 1: Organizing Childhood Pneumonia Awareness Sessions (PAS) for caregivers of children <5 years of age during a routine immunization day, using self-developed and validated IEC materials, in APHCs and CHC monthly, conducted by a trained ANM and project facilitator.

Intervention 2: Organizing PAS on Village Health and Nutrition Day (V.H.N.D.) only once a month by the ASHA worker trained for this.

Intervention 3: Combination of Both Intervention 1& 2

Intervention 4: Usual Care

*On***:** Number of clinical pneumonia cases-treated by ANMs/doctors with medicines from PDK OR Treated at either PMC or PMU

Primary Objective 2**:**To ascertain change, if any, in the types of health care providers' service utilization for acute respiratory illness (ARI)/CAP in last one year in children less than 5 years pre and post intervention.

Research Design: A prospective Community Based Open Labeled Behavioral Trial conducted in 2 by 2 factorial design in 8 rural blocks of Lucknow district after (a) capacity building of doctors, ANMs and ASHA workers by conducting training sessions and (b) establishing of PMC, PMU and distribution of PDK and ensuring other infra-structural up-gradation for facility based management of CAP. Health facility audits will be done to collect information on process indicators, i.e., (i) utilization of PDK, PMC and PMC and (ii) conduct of PAS sessions in APHC, CHC and/or during V.H.N.D. monthly. This will give also information for the primary objective 1. Community survey will be done by multistage cluster sampling to collect information on changes in the types of health care providers' service utilization for ARI/CAP pre and post intervention.

Data Management: Data will be managed on MS-Excel. Data analysis will be done on SPSS. Tests of proportion will be applied to compare outcomes across the 4 intervention arms.

Implications: The project will build public health infrastructure for managing CAP. It will also bring about a positive change in the community behavior when confronted with a case of CAP. This will improve quality of care of CAP and thus result in reduced mortality in Lucknow district. Since the work will be done in partnership with the government, it can be scaled up and thus will result in reduced infant and under-fives mortality rate and help in achieving MDG 4.