## Health Care Seeking for Maternal and Newborn Health

## **Zohra S Lassi** BScN, MHM, MSc EB

Discipline of Obstetrics and Gynaecology School of Medicine Faculty of Health Sciences The University of Adelaide

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## **List of Abbreviations**

ALRI	Acute Lower Respiratory Infection
AMSTAR	Assessment of Multiple Systematic Reviews
BHU	Basic Health Unit
CDP	Continuous Distending Pressure
CHW	Community Health Workers
CI	Confidence Interval
CMWs	Community Midwives
CPAP	Continuous Positive Airway Pressure
EmONC	Emergency Obstetric and Neonatal Care
EPOC	Effective Practice, Organization and Communication
GRADE	Grading of Recommendations, Assessment, Development and Evaluation
HFPPV	High Frequency Positive Pressure Ventilation
HIC	High Income Countries
IPT	Intermittent Preventive Treatment
ITN	Insecticide Treated Nets
KMC	Kangaroo Mother Care
LHW	Lady Health Worker
LMIC	Low and Middle Income Countries
MD	Mean Difference
MDGs	Millennium Development Goals
PDHS	Pakistan Demographic and Health Survey
PROM	Premature Rupture of Membrane
RCT	Randomized Controlled Trial
RDS	Respiratory Distress Syndrome
RHC	Rural Health Centre
RMNCH	Reproductive, Maternal, Newborn and Child Health
RR	Risk Ratio
SAM	Severe Acute Malnutrition
SBA	Skilled Birth Attendants
SDG	Sustainable Developmental Goals
SP	Sulfadoxine Pyrimethamine
STI	Sexually Transmitted Infections
TBA	Traditional Birth Attendants
TT	Tetanus Toxoid
WHO	World Health Organization

#### **Abstract**

### **Background**

Complications during pregnancy and childbirth can lead to emergency situations which are critical to address promptly in order to avoid birth-related deaths of mothers and newborns.

#### Aims

- 1. To identify effective interventions for improving neonatal and child survival.
- 2. To identify strategies for improving maternal and newborn health care seeking in lowand middle-income countries.
- 3. To understand the maternal and neonatal health care seeking pathways in rural communities of Pakistan.
- 4. To assess the effectiveness of the Emergency Obstetric and Neonatal Care (EmONC) package on health care seeking behaviour in rural communities of Pakistan.

#### **Methods**

To evaluate the above aims, the following methodologies were employed:

- 1. An overview of systematic reviews on World Health Organization list of essential interventions.
- 2. A systematic review of quantitative and qualitative studies.
- 3. A qualitative assessment of the perceptions of health care seeking.
- 4. A cluster randomised controlled trial to evaluate the impact of the EmONC package.

#### **Results**

- 1. The overview identified six effective and 11 promising interventions for improving fetal, neonatal and child survival. The effective interventions include corticosteroids for at-risk pregnant women, breastfeeding, cord care, kangaroo care, treated bednets for children, and vitamin A for infants from six months.
- 2. The meta-analysis of 29 RCTs, with a range of different community-based interventions provided through community mobilization and home visitation, indicated significant improvement in health care seeking for neonatal illnesses (RR 1.47; 95% CI 1.24-1.75), whereas, no impact was seen on health care seeking for maternal illnesses (RR 1.06; 95% CI 0.92-1.22). The review of 151 observational and qualitative studies identified several social, cultural and health services related factors that contribute to delays in health care seeking.

- 3. Factors which lead to delays in health care seeking include lack of women's autonomy to decide to seek care, lack of money, workload at home, and the attitude of staff at health facilities.
- 4. The EmONC package showed no impact on health care seeking for maternal and newborn illnesses. However, improvements were seen in uptake of beneficial aspects of maternal and newborn care including receiving antenatal care (RR 1.06; 95% CI 1.04-1.08), use of clean delivery kits (RR 1.49; 95% CI 1.45-1.54), skilled birth attendance (RR 1.07; 95% CI 1.04-1.10), and newborn care practices including application of chlorhexidine to the umbilical cord and emollient use.

#### **Conclusion**

While comprehensive adoption of the effective and promising interventions can improve neonatal and child survival around the world; community-based intervention strategies such as home visitation and counselling can help improve the awareness and accessibility of those interventions. In Pakistan, strategies are not only required to prevent the delay in health care seeking, which include reinforcement of health supplies and improvement in practices of health care profession, but also to improve factors which can prevent women from using health facilities. Although the EmONC package did not show any improvement in health care seeking for maternal and newborn illnesses, improvements were observed in the uptake of antenatal care attendance, institutional births, skilled birth attendance, and other care practices.

**Declaration** 

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Zohra S Lassi

BScN, MHM, MSc EB

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