BACKGROUND

Description of the condition
• Neonatal period is the most vulnerable for child’s survival. Small size at birth is the biggest risk factor for more than 80% of neonatal deaths, and increases risk of post-neonatal mortality, growth failure, and adult-onset non-communicable diseases [1].
• LBW infants born in hospitals are kept in incubators or radiant warmers which is expensive and time consuming.

Description of the intervention
KMC is an early, prolonged and continuous skin-to-skin contact between the mother and the LBW infant both in hospital and after discharge, with exclusive breastfeeding and proper follow up.

OBJECTIVES
Primary objective was to review and summarize the available evidence on cost analysis, cost savings, and cost effectiveness of KMC.

PICO(S)
Population LBWs, VLBIs, neonates
Intervention LBWs, VLBIs, neonates receiving KMC
Comparators No KMC, Other care
Outcomes Costs, cost savings, cost effectiveness analysis
Study designs RCTs, quasi-RCTs, Cohort, Costing, Cost of illness, Economic modelling, Budget impact

RESULTS
COST ANALYSIS STUDIES
• KMC was found to be 50%- 70% cheaper than CMC across the studies.
• The length of stay for KMC LBWI was significantly lower compared to CMC.

ECONOMIC EVALUATION (EE) STUDIES
• Broughton (2013) conducted a cost-minimization analysis, showing savings after one year of implementation, with savings between US$233000-US$166000 annually.
• Entringen (2013) stated the budget impact of KMC for 1000 newborns as R$6795661.30. The daily costs was found to be 13% lower of second stage KM compared to Neonatal IU.
• Two studies from India conclude KMC to be a cost-effective measure with cost savings ranging from US$450-US$512 due to the initiation of early shifting of babies to Kangaroo Care Ward. [2]

DISCUSSION
• The main reasons for cost savings are the lower need for materials and supplies, drugs, oxygen, and lower proportion of staff time devoted due to KMC.
• The empirical evidence of cost savings and cost effectiveness is currently limited to only hospital-based KMC programs.

CONCLUSION
The very few evidences that do exist suggest that KMC can be cost saving and cost effective in low and middle-income countries.

STUDY IMPLICATION
Policy makers should ensure that proper guidelines are in place with adequate budgetary provision to ensure the implementation of KMC across all types of health facilities, both private and public.

1. Lawn JE, Blencowe H, Oza S, You D, Lee AC, Waiswa P, et al. Lancet Every Newborn Study Group. Every Newborn: progress, priorities, and potential beyond survival. Lancet2016;388(9993):189-205.