PMNCH Board Meeting December 2-4, 2009 Ottawa, Canada









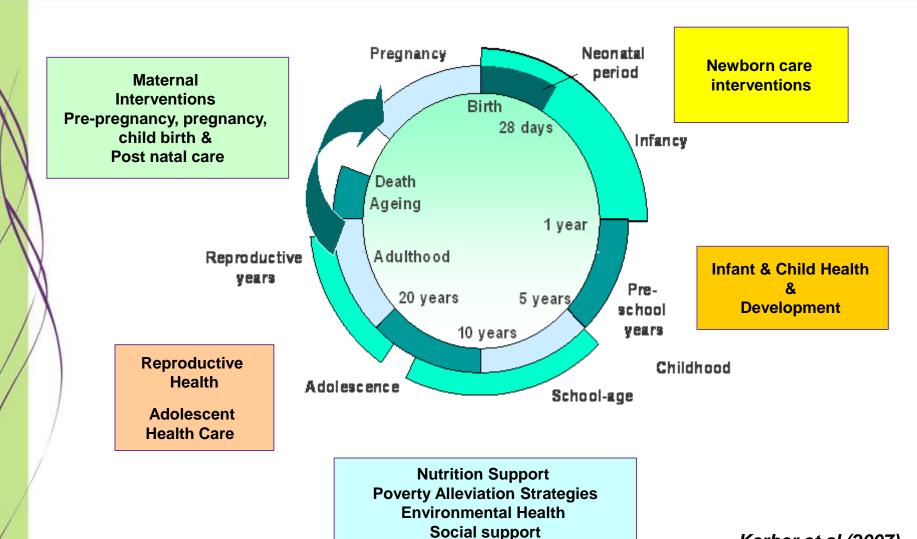
# Priority Action 2 Core Packages Report

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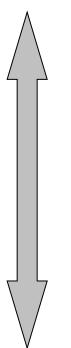


Kerber et al (2007)



Continuum of care across the life cycle

### Continuum of care across service delivery pathways



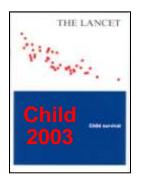
## **Hospitals & Health Facilities**

**Outpatient and Outreach Facilities** 

Family and Community Care



## What works?



Over 190 single interventions reviewed





Maternal
Series
2006

Reproductive Health Series 2006

THE LANCET

Child
develop
ment
series
2007

Under
Nutrition
series
2008

#### Plus those:

- Currently included in WHO recommendations (e.g. IMCI, Hospital care pocketbook, guidelines, MPS list of interventions etc.)
- Provided in Published in other related/similar publications

### **Issues & limitations**

- Lack of consensus on how best to move in a coordinated manner
- Lack of resources to develop initial landscape review and gap analysis:
  - Listing produced in 2007 was considered too exhaustive
  - Previous effort at developing a landscape review in 2007-8 was unsuccessful (outsourcing may not necessarily work!)
  - Extensive work at WHO initiated using GRADE criteria (Also LiST process and CHERG/MMERG)
  - Consensus needed on level of evidence as well as: context and scale of the intervention for interventions relevant to MDG4 and MDG5



### maternal and child health through active partnership

## **Priority Action 2** Outputs

- Consensus developed on content of MNCH packages of interventions at each level of the health system and agreement on how to scale-up.
- Research gaps into content of core packages of interventions identified, and ongoing research mapped
- Consensus built on revised core MNCH packages to be delivered at each level and agreement on how to scale up.

#### maternal and child health through active partnership

## **Objectively Variable Indicators & Outputs: 2009**

- Consensus developed on content of MNCH package of interventions at each level of the health care delivery system and agreement on how to scale up.
  - Document with key interventions across the continuum of care with level of delivery available.
- Research gaps identified into content of core package of interventions identified, and ongoing researched mapped and synthesized.
  - Report of research gaps and mapping completed and gaps. identified

### **Outputs & Objectively Variable Indicators: 2010-11**

- Consensus built on revised core MNCH packages and agreement reached on how to scale up implementation.
  - **◆** Synthesis report on core packages;
  - **◆** Meeting report on agreement on strategy for scaling up.

## Salient Results for intervention packages & level of care



## Process to-date

- Dedicated joint teams
  - AKU (5 reviewers and senior faculty)
  - ◆ WHO (dedicated staff x 2) plus others
- Work initiated in August 2009
- Preliminary report on inventory for key interventions (Sept 2009)
- Face to face meeting and draft report for PMNCH Board (Nov 2009)
- Finalization of report and initial gaps assessment (Dec 2009)



## through active partnership

## Process for identification and selection of interventions for review and classification

Interventions included were those:

- Currently included in WHO recommendations (e.g. IMCI, Hospital care pocketbook, guidelines, etc.)
- Published in the various Lancet series.
- Provided in MPS list of interventions.
- Published in other related/similar publications



### maternal and child health through active partnership

## **Criteria for prioritization**

- Interventions expected to have a significant impact on maternal, newborn and child survival, addressing the main causes of maternal, newborn and child mortality
- Interventions suitable for implementation in low- and middle-income countries; minimal essential care
- Interventions delivered through the health sector, from the community up to the 1st referral level of health service provision

### **Activities**

- 1. Mapping of available evidence of efficacy of selected interventions for maternal, newborn and child survival (mostly from RCTs):
  - Cochrane reviews
  - Published Cochrane-type systematic reviews
  - Submitted Cochrane-type systematic reviews
  - Cochrane registered protocols
  - CAH commissioned systematic reviews

Mapping of available evidence on the <u>delivery</u> (either individually or in integrated manner) of these selected interventions for maternal, newborn and child survival (mostly from cRCTs focusing on program effectiveness):



### **Activities**

- 3. Application of the GRADE criteria to all intervention reviews and evidence
- 4. Assessment of quality of all published Cochrane-type systematic reviews using AMSTAR criteria, suggested by WHO, using this assessment to either keep or exclude the reviews as evidence



## **GRADE** criteria for assigning grade of evidence

### Type of evidence

Randomised trial = high

Observational study = low

Any other evidence = very low

### Decrease grade if:

- Serious (-1) or very serious (-2) limitation to study quality
- Important inconsistency ( I)
- ❖ Some ( − I) or major ( − 2) uncertainty about directness
- Imprecise or sparse data ( I)
- High probability of reporting bias ( 1)

#### Increase grade if:

- Strong evidence of association—significant relative risk of > 2 ( < 0.5) based on consistent evidence from two or more observational studies, with no plausible confounders (+1)
- ❖ Very strong evidence of association—significant relative risk of > 5 ( < 0.2) based on direct evidence with no major threats to validity (+2)
- Evidence of a dose response gradient (+1)
- All plausible confounders would have reduced the effect (+1)

## Next steps

- 1. Consensus meeting of stake holders and experts to agree on core packages (? Feb 17-18, 2010)
- 2. Summarize the results of the systematic reviews, also presenting the level of mortality averted, feasibility and level (complexity) of delivery
- 3. Identify gaps and prioritize work needed
- 4. Commission of reviews identified as priority (to be commissioned & completed in 2010)
- 5. Consensus Packages for Implementation and Scaling up
- 6. Publication of process and key findings
- 7. Stakeholder meeting on delivery strategies for above packages (early 2011)



## PA<sub>2</sub> Classification of Interventions according to available evidence

Nov 2009

### **Definition of classification**

- **❖** A = Sufficient evidence for efficacy of intervention for application and scale up. (maybe level specific)
- **❖** B = Some evidence of efficacy but further evidence needed for scale up
- C = No or controversial evidence



# **Pre-pregnancy Interventions Classification**

Intervention	Referral level	1 <sup>st</sup> level / Outreach	Community
Interventions to delay first pregnancy and promote birth spacing	А	А	А
Peri-conceptual folic acid	А	А	А
Prevention & management of STIs including HIV	А	А	А
Nutrition education (balanced diet)	С	С	С
Iron supplementation for prevention of anemia	С	С	С



# Management of unwanted/unintended pregnancy Classification

Intervention	Referral level	1 <sup>st</sup> level	Community
Availability and provision of safe abortion when indicated and legally permitted	A	-	-
Provision of post abortion care	А	В	

## **Antenatal Care Interventions Classification**

Intervention	Referra I Level	1 <sup>st</sup> level / Outreach	Community
<ul> <li>Appropriate antenatal care package including:         <ul> <li>Screening for maternal illness</li> <li>Screening for hypertensive disorders of pregnancy</li> <li>Screening for anemia</li> <li>Screening for fetal growth problems &amp; malpresentation</li> <li>Iron and folic acid supplementation</li> <li>Tetanus immunization</li> <li>Counselling on family planning, birth and emergency preparedness</li> <li>Screening detection and appropriate management of STIs including PMTCT of HIV</li> <li>IPT and ITN and case management of malaria in malarious areas</li> <li>Interventions for smoking and alcohol cessation</li> </ul> </li> </ul>	A	A	C



# **Antenatal Care Interventions Classification**

Intervention	Referral level	1 <sup>st</sup> level / Outreach	Community
Interventions to reduce malpresentations (> 36 weeks)	А	-	-
Management of antepartum hemorrhage	А	-	-
Management of pre-eclampsia	А	В	-
Aspirin for prevention of pre-eclampsia	В	-	-
Calcium for prevention of pre-eclampsia	В	-	-
Multiple micronutrient supplementation	В	В	В
Maternity waiting homes	В	В	-



# **Childbirth Interventions Classification**

Intervention	Referral level	1 <sup>st</sup> level HF	Community
MANAGEMENT OF UNCOME	PLICATED I	ABOUR	
Partograph use in labour	A*	A*	-
Social support during labour	Α	А	А
Infection prevention	А	А	А
Analgeisa in labour	А	В	С
Active management of third stage of labour with oxytocin	А	А	С
Immediate care of mother after childbirth	А	А	С

<sup>\*</sup> Further evidence synthesis underway



# **Childbirth Interventions Classification**

Intervention	Referral level	1 <sup>st</sup> level	Community
MANAGEMENT OF COMPL	ICATED LA	ABOUR	
Interventions to manage prolonged or obstructed labour	А	С	С
Cesarean delivery for specific indications incl. foetal distress	А	-	-
Prevention and treatment of eclampsia	А	С	С
Management of preterm labour and childbirth	А	-	-
Management of PPROM & PROM	А	-	-



# **Childbirth Interventions Classification**

Intervention	Referral level	1 <sup>st</sup> level	Community
OTHER SPECIFIC INTERVENTIONS			
Management of postpartum hemorrhage	А	В	С
Breech delivery	А	-	-



# **Early Postnatal Interventions Classification**

Intervention	Referral level	1 <sup>st</sup> level	Community
Advice and support for breastfeeding	А	А	А
Information and counselling regarding danger signs and emergency preparedness	С	С	С
Advice and provision of family planning	А	А	А
Detection and treatment of maternal anemia	А	В	В
Detection & treatment of maternal infection	А	В	В
ART for HIV	А	А	-
Management of puerperal blues and psychosis (depression)	С	С	С



# **Newborn Care Interventions Classification**

Intervention	Referral level	1 <sup>st</sup> level	Community
Skin-to-skin contact for the first hour of life	A	В	В
Early initiation of breastfeeding	Α	Α	Α
Positive pressure ventilation with room air for respiratory failure/asphyxia (neonatal resuscitation)	Α	В	В
Newborn skin anti-sepsis (chlorhexidine)	С	С	С
Chlorhexidine application on cord (or clean, dry, nothing applied on cord)	С	С	С
Vitamin K prophylaxis for the newborn	<b>A</b> *	В	-

<sup>\*</sup> Further evidence synthesis underway



# **Newborn Care Interventions Classification**

Intervention	Referral level	1 <sup>st</sup> level	Community
Kangaroo mother care for LBW/preterm infants	Α	В	В
Topical emollient therapy for preterm/LBW infants	В	С	С
Injectable antibiotics for neonatal sepsis	А	А	В
Oral antibiotics for localized skin or umbilical infections	А	А	В
Oral antibiotics for neonatal pneumonia	A*	A*	В

<sup>\*</sup> Further evidence synthesis underway



# **Newborn Care Interventions Classification**

Intervention	Referral level	1 <sup>st</sup> level	Community
Surfactant therapy for very preterm babies to prevent or treat respiratory distress syndrome (RDS)	А	-	-
Continuous positive airway pressure (CPAP) to prevent or treat RDS	А	-	-
Home-based neonatal care*	-	-	А
Antibiotics for the newborn if at risk of bacterial infection (maternal infection, fever)	А	В	С
Neonatal vitamin A supplementation*	С	С	С

<sup>\*</sup> Further evidence synthesis underway



Intervention	Referral level	1 <sup>st</sup> level / Outreach	Community
Exclusive BF for 6 months	А	А	A
Continued breastfeeding up to 2 years of age	А	А	A
Complementary feeding 6-23 months of age	А	А	A
Iron supplementation for prevention	С	С	С
Vitamin A supplementation	А	А	А
Zinc supplementation (preventive)	В	В	В
lodine supplementation	С	С	С
MMN supplements (Sprinkles)	С	С	С



Intervention	Referra I level	1 <sup>st</sup> level / Outreach	Community
Insecticide-treated bed nets for children	-	А	А
Malaria prevention in children (? IPTi)	С	О	С
Antiretroviral therapy to improve HIV-free survival	А	В	В
Appropriate feeding for HIV-exposed child	А	А	А
EPI and EPI plus (H.influenzae)	А	А	-
Pneumococcal conjugate vaccination	А	А	-
Rotavirus vaccine	А	А	-



Intervention	Referral level	1 <sup>st</sup> level / Outreach	Community
Management of severe acute malnutrition	А	А	В
Case management of childhood pneumonia	А	А	А
Case management of childhood meningitis	А	С	С
Enhanced diarrhoea management (ORS, zinc and continued breastfeeding and diet)	A	Α	Α
Antibiotics for the treatment of dysentery in children	А	А	С
Antibiotics for the treatment of cholera in children	А	А	С



Intervention	Referral 1st level / level Outreach		Community		
Deworming for prevention	С	С	С		
Hand washing promotion strategies		С	В		





### Interventions with A level evidence across ALL levels of care

Intervention	Referral level	1 <sup>st</sup> level / Outreach	Community
Interventions to delay first pregnancy and promote birth spacing	A	Α	Α
Advice and provision of family planning	Α	Α	Α
Peri-conceptual folic acid administration	Α	Α	Α
Prevention & management of STIs including HIV	Α	Α	Α
Social support during labour	Α	Α	Α
Infection prevention during labor & child birth	Α	Α	Α
Advice and support for breastfeeding	Α	Α	Α
Promotion of early initiation of breastfeeding	Α	Α	Α



### Interventions with A level evidence across ALL levels of care

\	Intervention	Referral level	1 <sup>st</sup> level / Outreach	Community
/	Promotion of exclusive breastfeeding for 6 months	A	A	Α
	Continued breastfeeding up to 2 years of age	Α	Α	Α
1	Appropriate complementary feeding 6-23 months age	A	A	A
/	Vitamin A supplementation in childhood	Α	Α	Α
/	Appropriate feeding for HIV-exposed children	Α	A	Α
	Case management of childhood pneumonia	A	A	A
1	Enhanced diarrhea management (ORS, zinc and continued breastfeeding and diet)	A	Α	Α



### Interventions with A level evidence across two levels of care

Intervention	Referral level	1 <sup>st</sup> level / Outreach	Community
Appropriate antenatal care package (including 10 components)	A	Α	С
Partograph use in labour	<b>A</b> *	<b>A</b> *	-
Active management of third stage of labour with oxytocin	Α	Α	С
Immediate care of mother after childbirth	Α	Α	С
ART for HIV	A	Α	С
Injectable antibiotics for neonatal sepsis	Α	Α	С
Oral antibiotics for localized skin or umbilical infections	Α	Α	С
Oral antibiotics for neonatal pneumonia	<b>A</b> *	<b>A</b> *	В
EPI plus and Pneumococcal and Rotavirus vaccine	A	Α	С
Management of severe acute malnutrition	A	Α	В
Antibiotics for the treatment of dysentery in children	A	Α	В
Antibiotics for the treatment of cholera in children	Α	Α	В
Insecticide-treated bed nets for children	-	Α	Α
Home-based neonatal care*	-	-	Α

<sup>\*</sup> Expanded review under progress