World Health Organization

Launch of WHO recommendations for care of the preterm or low-birth-weight infant

Thursday, 17 November 2022
World Prematurity Day

Interpretation is available in French. Please click on the Interpretation globe icon at the bottom of the screen.

Une interprétation est disponible en Français. Veuillez cliquer sur l'icône du globe d'interprétation au bas de votre écran.

This webinar is hosted by the Department of Maternal, Newborn, Child and Adolescent Health and Ageing, WHO Geneva

Opening remarks

Dr Anshu Banerjee

Director, Department of Maternal, Newborn, Child and Adolescent Health and Ageing

World Health Organization Geneva

Agenda

Welcome & opening remarks

Dr Anshu Banerjee, WHO Geneva

Part 1: Recommendations and potential impact

WHO recommendations:

Dr Karen Edmond, WHO Geneva

What is important and new, and why: Prof Vinod Paul, NITI Aayog India

Potential impact: Dr Rajiv Bahl, Indian Council of Medical Research

Scaling up, what will it take:

Dr Gagan Gupta, UNICEF New York

Part 2: What the recommendations could mean for families and health services

Moderator: Prof Gary Darmstadt, Stanford University School of Medicine

Ms Silke Mader, Prof Carole Kenner, Prof Suman Rao, Prof Ebunoluwa Adejuyigbe, Prof Karim Manji, Prof Mohammod Shahidullah, Prof Shabina Ariff, Prof Zelee Hill

Part 3: Next steps

Plans for WHO implementation: Dr Rajesh Mehta (WHO Geneva, SEARO), Dr Shuchita Gupta (WHO Geneva, SEARO)

Closing remarks: Dr Anshu Banerjee

Part 1
New recommendations and potential impact

WHO recommendations for care of the preterm or low birth weight infant

Dr Karen Edmond

World Health Organization, Geneva

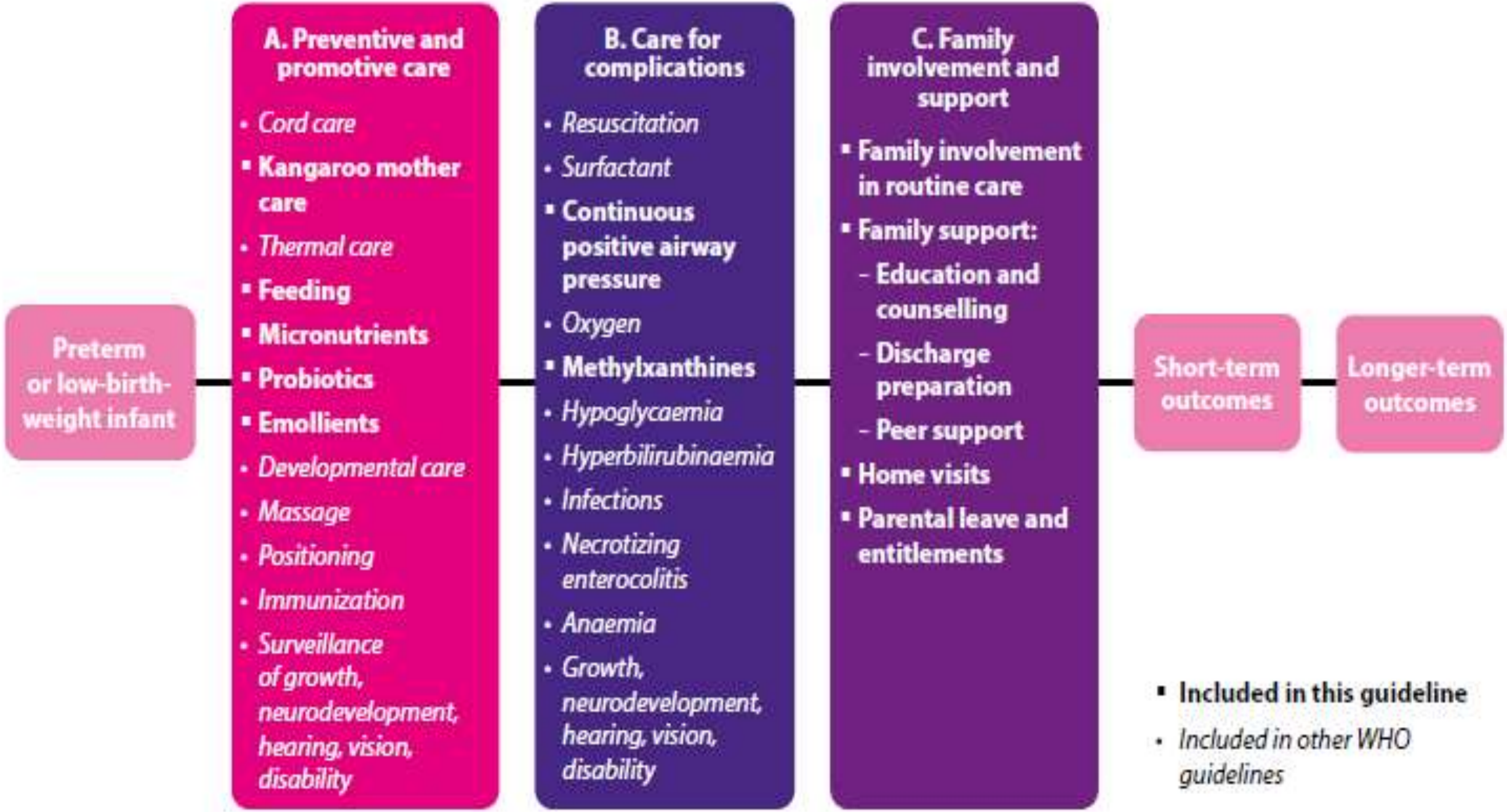
Recommendations

Recommendations:
https://apps.who.int/iris/bitstream/handle/10665/363697/9789240058262-eng.pdf

Web annexes:
https://apps.who.int/iris/bitstream/handle/10665/363698/9789240060043-eng.pdf

Evidence base. Web supplement:
https://apps.who.int/iris/bitstream/handle/10665/363699/9789240060050-eng.pdf

- 25 recommendations
- 11 new, 14 updated
- 11 strong, 14 conditional on particular contexts or limited evidence
- 1 good practice statement


Preterm or low-birth-weight infant
A. Preventive and promotive care
• Cord care
▪ Kangaroo mother care
• Thermal care
▪ Feeding
▪ Micronutrients
▪ Probiotics
▪ Emollients
• Developmental care
• Massage
• Positioning
• Immunization
• Surveillance of growth, neurodevelopment, hearing, vision, disability
B. Care for complications
• Resuscitation
• Surfactant
▪ Continuous positive airway pressure
• Oxygen
▪ Methylxanthines
• Hypoglycaemia
• Hyperbilirubinaemia
• Infections
• Necrotizing enterocolitis
• Anaemia
• Growth, neurodevelopment, hearing, vision, disability
C. Family involvement and support
▪ Family involvement in routine care
▪ Family support:
– Education and counselling
– Discharge preparation
– Peer support
▪ Home visits
▪ Parental leave and entitlements
Short-term outcomes
Longer-term outcomes
▪ Included in this guideline
• Included in other WHO guidelines

Summary of process

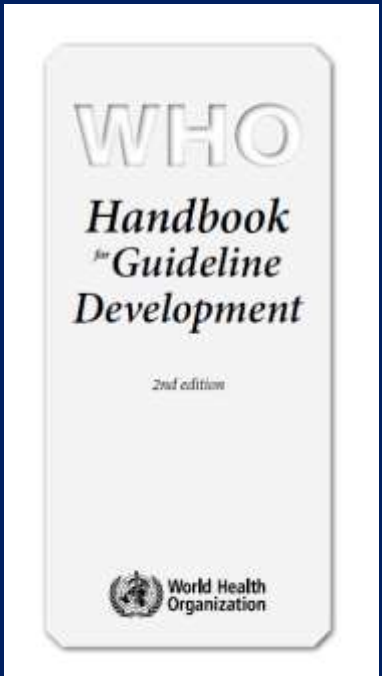
	Formulate GDG and scoping
	Specify review questions
	38 systematic reviews
	Grading of the quality and certainty of body of evidence
	Evidence to decision framework development
	Formulation of judgements and recommendations
	Finalisation
	Publishing
	Implementation eg derivative tool and course updating
	Monitoring, evaluation

Guideline development group (GDG)

- 25 members, 20 countries: Uganda, Nigeria, Ethiopia, Tanzania, USA, UK, Sweden, Germany, Lebanon, Yemen, Afghanistan, Argentina, Chile, India, Pakistan, Bangladesh, China, Vietnam, Philippines, Australia
- Expert neonatologists, paediatricians, nurses, patient representatives, qualitative researchers, public health specialists

GRADE evidence to decision framework

Effectiveness, certainty, values, acceptability, resources, feasibility, equity



GRADE Working Group. DECIDE (Developing and Evaluating Communication Strategies to support Informed Decisions and Practice based on Evidence). 2022 [website]. The Cochrane Collaboration. (https://www.decide-collaboration.eu/)

GRADE Working Group. Grading of Recommendations Assessment, Development and Evaluation. 2022 [website]. (http://gradeworkinggroup.org/)

GRADE-CERQual Project Group. GRADE-CERQual. 2021 [website]. (www.cerqual.org)

Recommendations

Recommendations:
https://apps.who.int/iris/bitstream/handle/10665/363697/9789240058262-eng.pdf

Web annexes:
https://apps.who.int/iris/bitstream/handle/10665/363698/9789240060043-eng.pdf

Evidence base. Web supplement:
https://apps.who.int/iris/bitstream/handle/10665/363699/9789240060050-eng.pdf

Domain	Recommendation	Status	Strength/ type
A. PREVENTIVE AND PROMOTIVE CARE			
A.1a Any KMC	Kangaroo mother care (KMC) is recommended as routine care for all preterm or low-birth-weight infants. KMC can be initiated in the health-care facility or at home and should be given for 8–24 hours per day (as many hours as possible). (*Strong recommendation, high-certainty evidence*)	Updated	Strong
A.1b Immediate KMC	Kangaroo mother care (KMC) for preterm or low-birth-weight infants should be started as soon as possible after birth. (*Strong recommendation, high-certainty evidence*)	New	Strong
A.2 Mother's own milk	Mother's own milk is recommended for feeding of preterm or low-birth-weight (LBW) infants, including very preterm (< 32 weeks' gestation) or very LBW (< 1.5 kg) infants. (*Strong recommendation, low-certainty evidence*)	Updated	Strong
A.3 Donor human milk	When mother's own milk is not available, donor human milk may be considered for feeding of preterm or low-birth-weight (LBW) infants, including very preterm (< 32 weeks' gestation) or very LBW (< 1.5 kg) infants. (*Conditional recommendation, moderate-certainty evidence*)	Updated	Conditional
A.4 Multicomponent fortification of human milk	Multicomponent fortification of human milk is not routinely recommended for all preterm or low-birth-weight (LBW) infants but may be considered for very preterm (< 32 weeks' gestation) or very LBW (< 1.5 kg) infants who are fed mother's own milk or donor human milk. (*Conditional recommendation, low-to-moderate-certainty evidence*)	Updated	Conditional
A.5 Preterm formula	When mother's own milk and donor human milk are not available, nutrient-enriched preterm formula may be considered for very preterm (< 32 weeks' gestation) or very low-birth-weight (< 1.5 kg) infants. (*Conditional recommendation, low-certainty evidence*)	Updated	Conditional
A.6 Early initiation of enteral feeding	Preterm and low-birth-weight (LBW) infants, including very preterm (< 32 weeks' gestation) and very LBW (< 1.5 kg) infants, should be fed as early as possible from the first day after birth. Infants who are able to breastfeed should be put to the breast as soon as possible after birth. Infants who are unable to breastfeed should be given expressed mother's own milk as soon as it becomes available. If mother's own milk is not available, donor human milk should be given wherever possible. (*Strong recommendation, moderate-certainty evidence*)	Updated	Strong
A.7 Responsive and scheduled feeding	In health-care facilities, scheduled feeding may be considered rather than responsive feeding for preterm infants born before 34 weeks' gestation, until the infant is discharged. (*Conditional recommendation, low-certainty evidence*)	Updated	Conditional
A.8 Fast and slow advancement of feeding	In preterm or low-birth-weight (LBW) infants, including very preterm (< 32 weeks' gestation) or very LBW (< 1.5 kg) infants, who need to be fed by an alternative feeding method to breastfeeding (e.g. gastric tube feeding or cup feeding), feed volumes can be increased by up to 30 ml/kg per day. (*Conditional recommendation, moderate-certainty evidence*)	Updated	Conditional
A.9 Duration of exclusive breastfeeding	Preterm or low-birth-weight infants should be exclusively breastfed until 6 months of age. (*Strong recommendation, very-low-certainty evidence*)	Updated	Strong
A.10a Iron supplementation	Enteral iron supplementation is recommended for human milk-fed preterm or low-birth-weight infants who are not receiving iron from another source. (*Strong recommendation, moderate-certainty evidence*)	Updated	Strong
A.10b Zinc supplementation	Enteral zinc supplementation may be considered for human milk-fed preterm or low-birth-weight infants who are not receiving zinc from another source. (*Conditional recommendation, low-certainty evidence*)	Updated	Conditional
A.10c Vitamin D supplementation	Enteral vitamin D supplementation may be considered for human milk-fed preterm or low-birth-weight infants who are not receiving vitamin D from another source. (*Conditional recommendation, low-certainty evidence*)	Updated	Conditional
A.10d Vitamin A supplementation	Enteral vitamin A supplementation may be considered for human milk-fed very preterm (< 32 weeks' gestation) or very low-birth-weight (< 1.5 kg) infants who are not receiving vitamin A from another source. (*Conditional recommendation, low-certainty evidence*)	Updated	Conditional
A.11 Probiotics	Probiotics may be considered for human-milk-fed very preterm infants (< 32 weeks' gestation). (*Conditional recommendation, moderate-certainty evidence*)	New	Conditional
A.12 Emollients	Application of topical oil to the body of preterm or low-birth-weight infants may be considered. (*Conditional recommendation, low-certainty evidence*)	New	Conditional

B. CARE FOR COMPLICATIONS			
B.1 CPAP for respiratory distress syndrome	Continuous positive airway pressure (CPAP) therapy is recommended in preterm infants with clinical signs of respiratory distress syndrome. (*Strong recommendation, moderate-certainty evidence*)	Updated	Strong
B.2 CPAP immediately after birth	Continuous positive airway pressure (CPAP) therapy may be considered immediately after birth for very preterm infants (< 32 weeks' gestation), with or without respiratory distress. (*Conditional recommendation, low-certainty evidence*)	New	Conditional
B.3 CPAP pressure source (bubble CPAP)	For preterm infants who need continuous positive airway pressure (CPAP) therapy, bubble CPAP may be considered rather than other pressure sources (e.g. ventilator CPAP). (*Conditional recommendation, low-certainty evidence*)	New	Conditional
B.4 Methylxanthines for treatment of apnoea	Caffeine is recommended for the treatment of apnoea in preterm infants. (*Strong recommendation, moderate-certainty evidence*)	New	Strong
B.5 Methylxanthines for extubation	Caffeine is recommended for the extubation of preterm infants born before 34 weeks' gestation. (*Strong recommendation, moderate-certainty evidence*)	New	Strong
B.6 Methylxanthines for prevention of apnoea	Caffeine may be considered for the prevention of apnoea in preterm infants born before 34 weeks' gestation. (*Conditional recommendation, low-certainty evidence*)	New	Conditional

C. FAMILY INVOLVEMENT AND SUPPORT			
C.1 Family involvement	Family involvement in the routine care of preterm or low-birth-weight infants in health-care facilities is recommended. (*Strong recommendation, low- to moderate-certainty evidence*)	New	Strong
C.2 Family support	Families of preterm or low-birth-weight infants should be given extra support to care for their infants, starting in health-care facilities from birth and continued during follow-up post-discharge. The support may include education, counselling and discharge preparation from health workers, and peer support. (*Conditional recommendation, very-low-certainty evidence*)	New	Conditional
C.3 Home visits	Home visits by trained health workers are recommended to support families to care for their preterm or low-birth-weight infant. (*Strong recommendation, moderate-certainty evidence*)	New	Strong
C.4 Parental leave and entitlements	Parental leave and entitlements should address the special needs of mothers, fathers and other primary caregivers of preterm or low-birth-weight infants. (*Good practice statement*)	New	Good practice statement

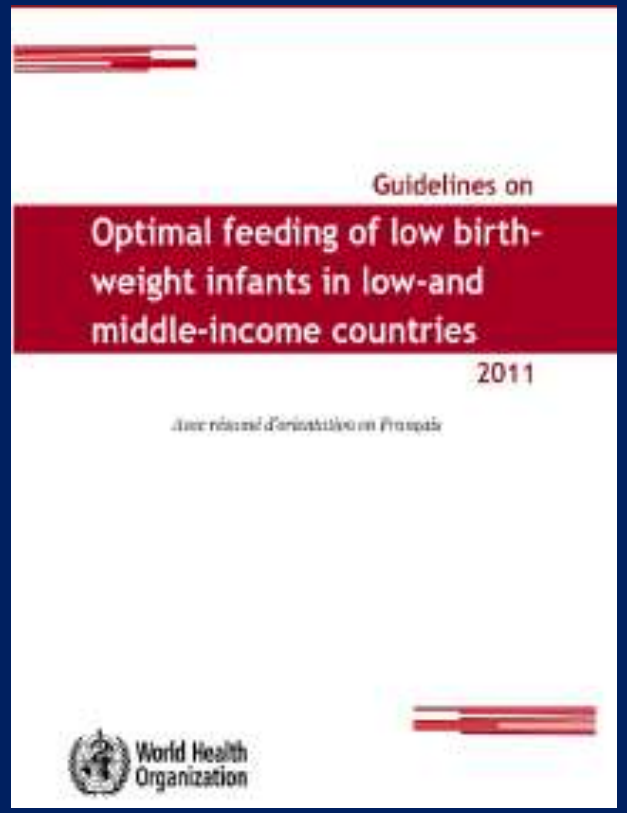
What is important and new, and why?

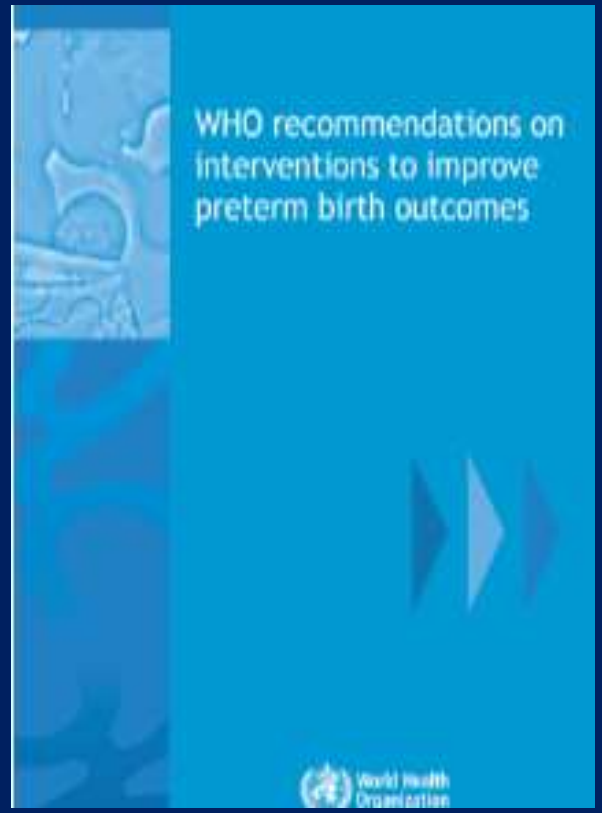
Dr Vinod K. Paul

Member (Health, Nutrition, Women & Child Development)

National Institution for Transforming India- NITI Aayog, India

WHO guidelines for the care of preterm or LBW infants were last updated in 2011, 2013 and 2015





11 strong recommendations (interventions that are recommended)

- New
  - Immediate KMC
  - Caffeine for apnoea and extubation
  - Family involvement
  - Home visits
- Updated
  - KMC
  - Mothers own milk
  - Early initiation of enteral feeding
  - Duration of exclusive breastfeeding to six months
  - Iron supplementation
  - CPAP for RDS

14 conditional recommendations (interventions that may be considered)

- New
  - Probiotics
  - Emollients
  - CPAP immediately after birth
  - Caffeine to prevent apnoea
  - Education and counselling, peer support, discharge preparedness

- Updated
  - Donor human milk
  - Multicomponent fortifier
  - Preterm formula
  - Zinc, Vitamin A, D
  - Scheduled feeding
  - Fast advancement of feeding

Good practice statement

Parental leave and entitlements should address the special needs of mothers, fathers and other primary caregivers of preterm or low-birth-weight infants

No recommendation

No recommendation on the use of calcium, phosphorous, and multiple micronutrient supplementation due to insufficient evidence for their effectiveness

New strong recommendations

A.1a Any KMC	Kangaroo mother care (KMC) is recommended as routine care for all preterm or low-birth-weight infants. KMC can be initiated in the health-care facility or at home and should be given for 8–24 hours per day (as many hours as possible). (*Strong recommendation, high-certainty evidence*)	Updated	Strong
A.1b Immediate KMC	Kangaroo mother care (KMC) for preterm or low-birth-weight infants should be started as soon as possible after birth. (*Strong recommendation, high-certainty evidence*)	New	Strong
B.4 Methylxanthines for treatment of apnoea	Caffeine is recommended for the treatment of apnoea in preterm infants. (*Strong recommendation, moderate-certainty evidence*)	New	Strong
B.5 Methylxanthines for extubation	Caffeine is recommended for the extubation of preterm infants born before 34 weeks' gestation. (*Strong recommendation, moderate-certainty evidence*)	New	Strong
C.1 Family involvement	Family involvement in the routine care of preterm or low-birth-weight infants in health-care facilities is recommended. (*Strong recommendation, low- to moderate-certainty evidence*)	New	Strong
C.3 Home visits	Home visits by trained health workers are recommended to support families to care for their preterm or low-birth-weight infant. (*Strong recommendation, moderate-certainty evidence*)	New	Strong

Potential impact of the new WHO recommendations

Dr Rajiv Bahl

Indian Council of Medical Research

Scaling up, what will it take?

Dr Gagan Gupta

UNICEF New York


© UNICEF/UN0270486/van Oorsouw

Part 2
Moderated panel discussion

What the recommendations could mean for families and health services

Panel discussion

What the recommendations could mean for families and health services

Moderated by

Prof Gary Darmstadt

Stanford University School of Medicine

Panel discussion

Why these recommendations are important for families and services, how will they help, how they could be taken forward, what are the challenges, what is needed for implementation?

Mrs Silke Mader, European Foundation for the Care of Newborn Infants, Germany

Prof Carole Kenner, Council of International Neonatal Nurses, USA

Prof Suman Rao, St John's Medical College, Bangalore, India

Prof Ebunoluwa Adejuyigbe, Obafemi Awolowo Hospital, Nigeria

Prof Karim Manji, Muhimbili University of Health and Allied Sciences, Tanzania

Prof Mohammod Shahidullah, Bangabandhu Sheikh Mujib Medical University, Bangladesh

Dr Shabina Ariff, Aga Khan University, Pakistan

Prof Zelee Hill, University College London, UK


© UNICEF/UNI239131/Mawa

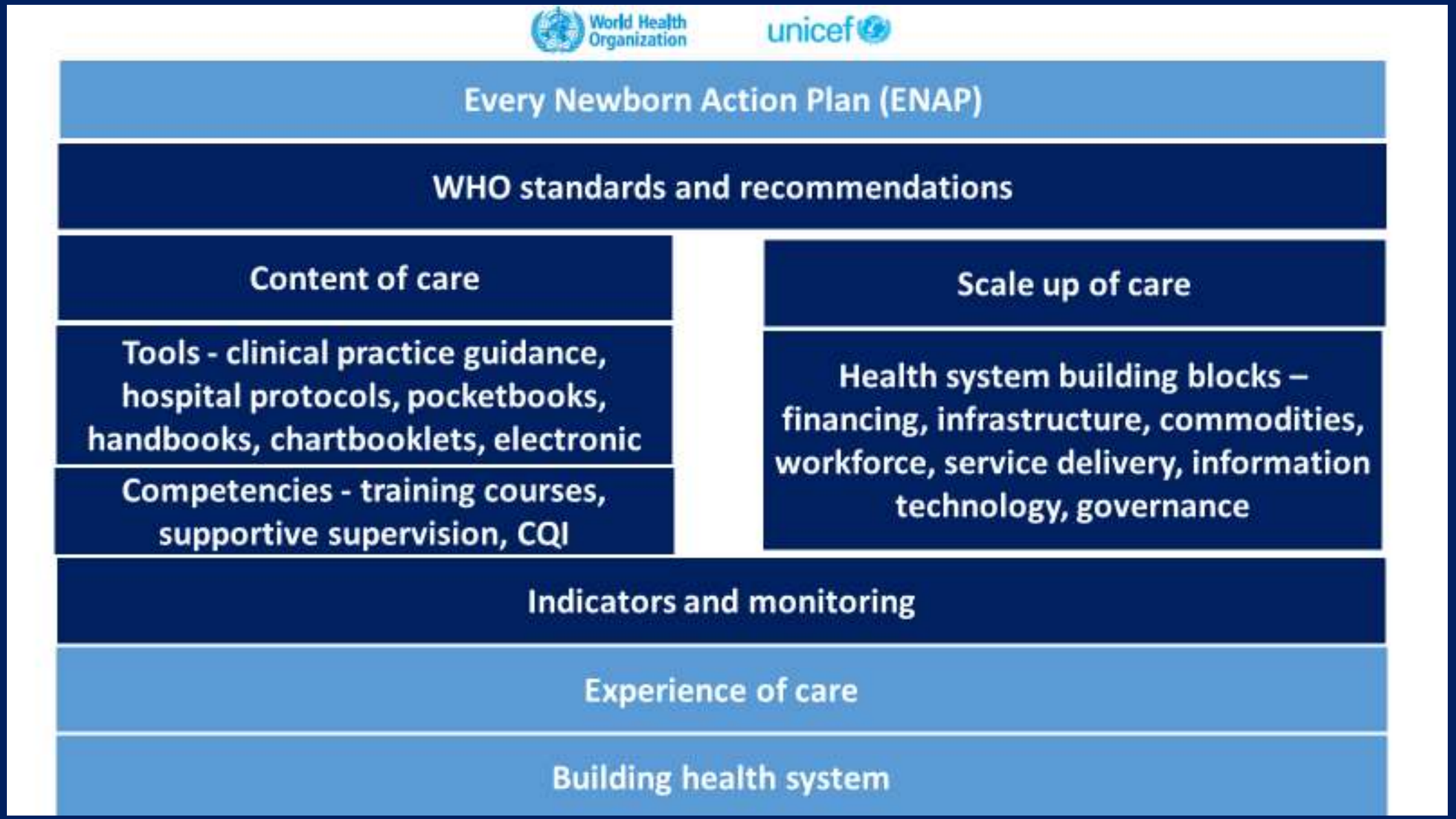
Part 3: Next steps

Plans for WHO implementation

Dr Rajesh Mehta

Consultant and formerly Regional Advisor for NCAH, WHO South-East Asia Regional Office

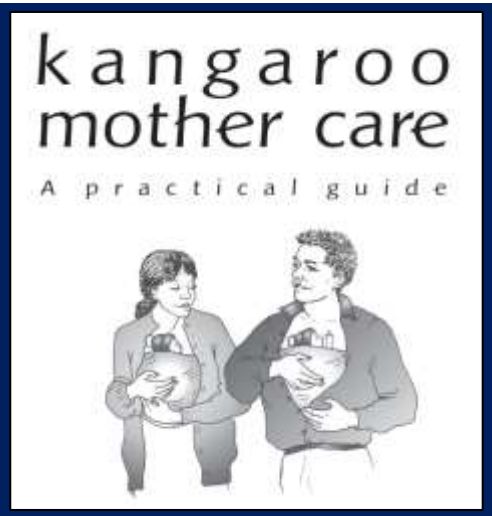
Implementation



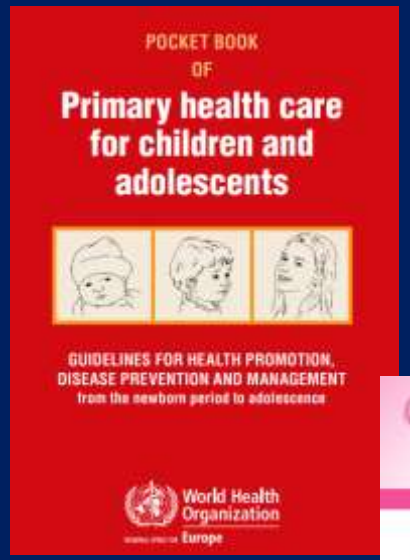
Implementation

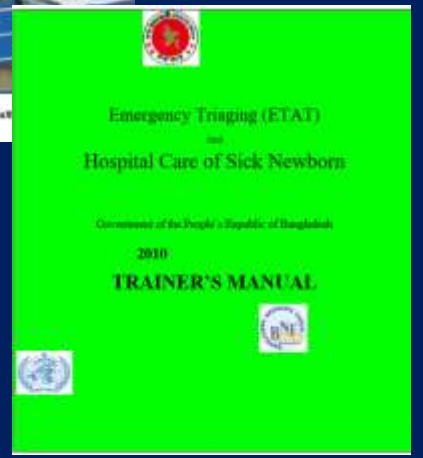
- WHO-UNICEF Implementation Guide for scaling up level-2 in-patient care for small or sick newborns in districts
  - Based on the health system oriented 10 components and content of care identified during Global consultation on SSNC in Dec 2021
  - Defining evidence-based norms to organize level-2 inpatient SSNC services in a district setting in LMICs: e,g, infrastructure, staffing, essential equipment including CPAP and standard provisions
- Small or sick newborn care course
- MNH indicators eg MONITOR and EMNOC frameworks to monitor implementation
- Updating existing technical products

Tools and courses - global



Tools and courses - regional and country



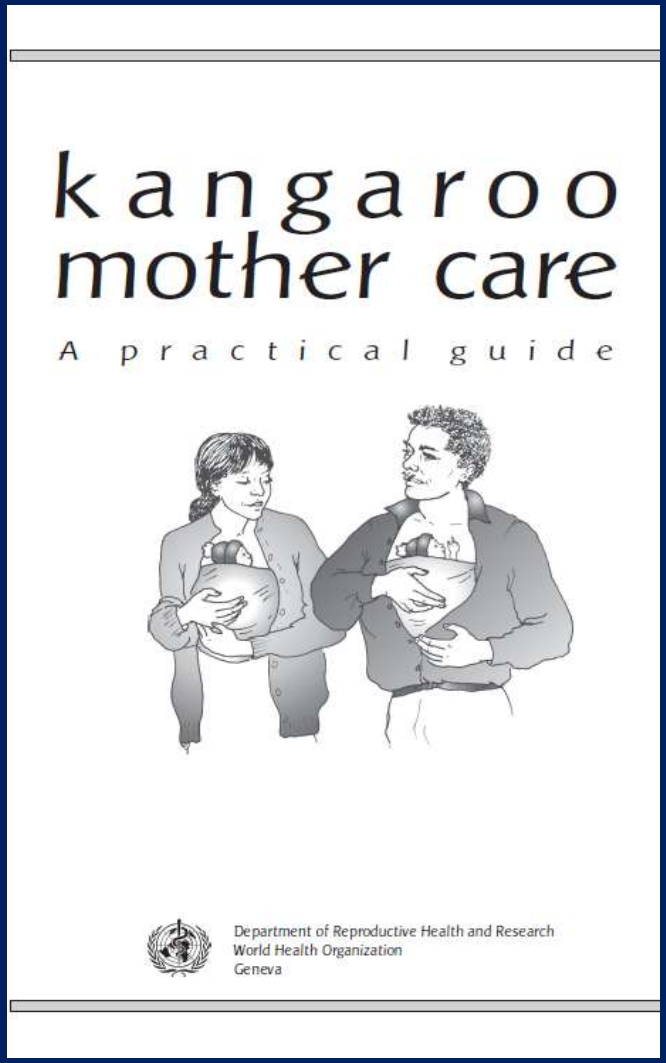


Implementation Strategy for specific recommendations: The KMC example

Dr Shuchita Gupta

WHO Geneva and WHO South-East Asia Regional Office

KMC Global Position Paper, Implementation Strategy, Practice Guide



Closing remarks

Dr Anshu Banerjee

Director, Department of Maternal, Newborn, Child and Adolescent Health and Ageing

World Health Organization Geneva

Access the recommendations

Recommendations:
https://apps.who.int/iris/bitstream/handle/10665/363697/9789240058262-eng.pdf

Web annexes:
https://apps.who.int/iris/bitstream/handle/10665/363698/9789240060043-eng.pdf

Evidence base. Web supplement:
https://apps.who.int/iris/bitstream/handle/10665/363699/9789240060050-eng.pdf

Additional resources

WHO Recommendations and standards

WHO recommendations on antenatal corticosteroids for improving preterm birth outcomes

WHO recommendation on tocolytic therapy for improving preterm birth outcomes

Standards for improving the quality of care for small and sick newborns in health facilities (who.int)

Facts and data

Updated factsheet – WHO fact sheet

UNICEF UNIGME webportal CME Info - Child Mortality Estimates

Information on the forthcoming decade edition of Born Too Soon

Every Newborn 2025 Coverage Target & Milestones Launch Sep 3 2020 (who.int)

Tools and courses

Management of the sick young infant aged up to 2 months: Chart booklet (who.int)

Pocket book of hospital care for children: Second edition (who.int)

Essential Newborn Care Training course (who.int)

Other publications

New WHO recommendations for the care of preterm or low birthweight infants have the potential to transform maternal and newborn health-care delivery (thelancet.com)

Continue the conversation

Hashtags: #WPD2022 #BornTooSoon #Preterm #Lowbirthweight

Handle: @WHO

Key Links:

- WHO recommendations for care of preterm or low-birth-weight infant
- WHO press release
- Updated factsheet

- Recording and materials for this launch event will be available here

Thank you for joining us!