Disclosure Statement

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Lead the trend:
The First " Evidence-Based Guideline for Breastfeeding Promotion Strategy " in China

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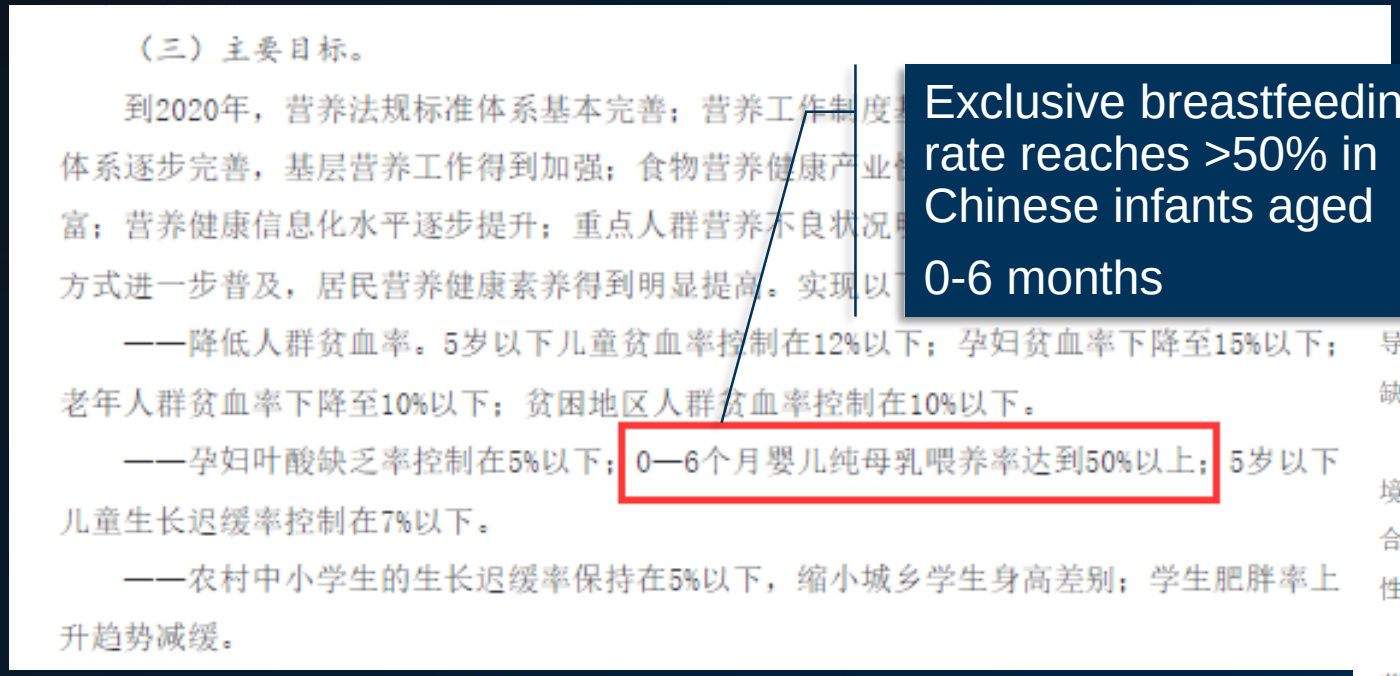
“National Nutrition Plan (2017-2030) “clearly proposes the objective for exclusive breastfeeding rate of infants

- The General Office of the State Council issued “National Nutrition Plan (2017-2030) on June 30, 2017, which proposes that exclusive breastfeeding rate reaches >50% in Chinese infants aged 0-6 months by 2020 and further increases by 10% by 2030


（三）主要目标。

到2020年，营养法规标准体系基本完善；营养工作制度
体系逐步完善，基层营养工作得到加强；食物营养健康产业
富；营养健康信息化水平逐步提升；重点人群营养不良状况
方式进一步普及，居民营养健康素养得到明显提高。实现以

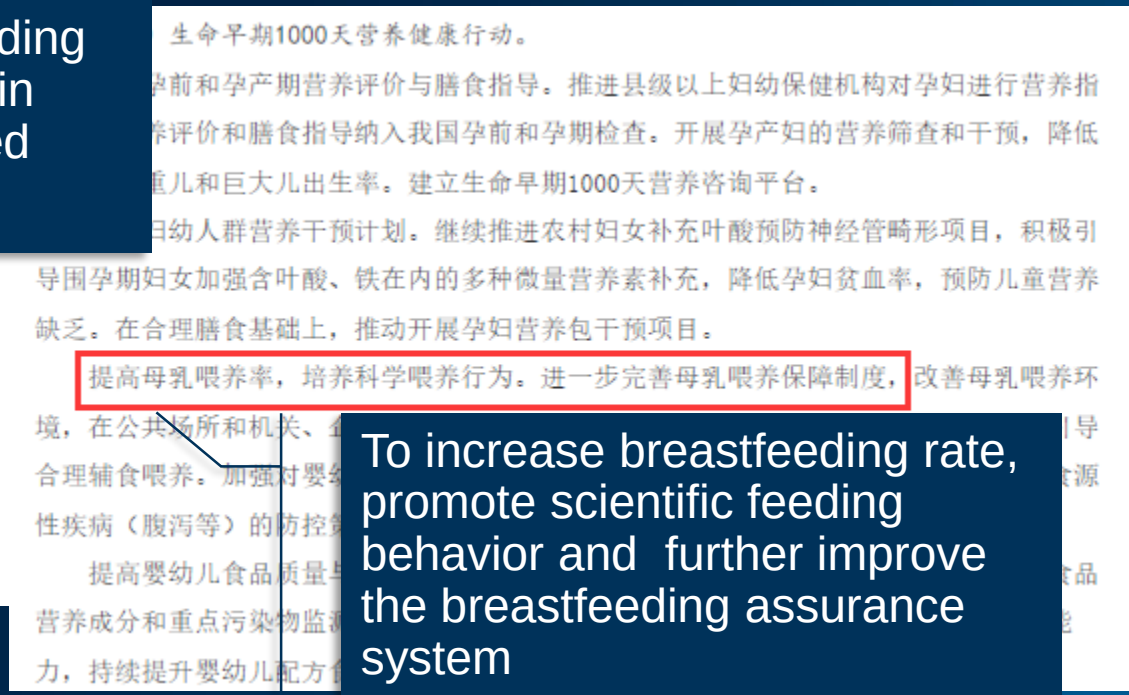
——降低人群贫血率。5岁以下儿童贫血率控制在12%以下；孕妇贫血率下降至15%以下；老年人群贫血率下降至10%以下；贫困地区人群贫血率控制在10%以下。

——孕妇叶酸缺乏率控制在5%以下；0—6个月婴儿纯母乳喂养率达到50%以上；5岁以下儿童生长迟缓率控制在7%以下。

——农村中小学生的生长迟缓率保持在5%以下，缩小城乡学生身高差别；学生肥胖率上升趋势减缓。

Exclusive breastfeeding rate reaches >50% in Chinese infants aged

0-6 months


生命早期1000天营养健康行动。

孕前和孕产期营养评价与膳食指导。推进县级以上妇幼保健机构对孕妇进行营养指
养评价和膳食指导纳入我国孕前和孕期检查。开展孕产妇的营养筛查和干预，降低
重儿和巨大儿出生率。建立生命早期1000天营养咨询平台。
妇幼人群营养干预计划。继续推进农村妇女补充叶酸预防神经管畸形项目，积极引
导围孕期妇女加强含叶酸、铁在内的多种微量营养素补充，降低孕妇贫血率，预防儿童营养缺乏。在合理膳食基础上，推动开展孕妇营养包干预项目。

提高母乳喂养率，培养科学喂养行为。进一步完善母乳喂养保障制度，改善母乳喂养环境，在公共场所和机关、
合理辅食喂养。加强对婴
性疾病（腹泻等）的防控
提高婴幼儿食品质量
营养成分和重点污染物监
力，持续提升婴幼儿配方

To increase breastfeeding rate, promote scientific feeding behavior and further improve the breastfeeding assurance system

Breast milk is the best food for infants

In some special cases such as illness,

breast milk is also an irreplaceable “medicine”

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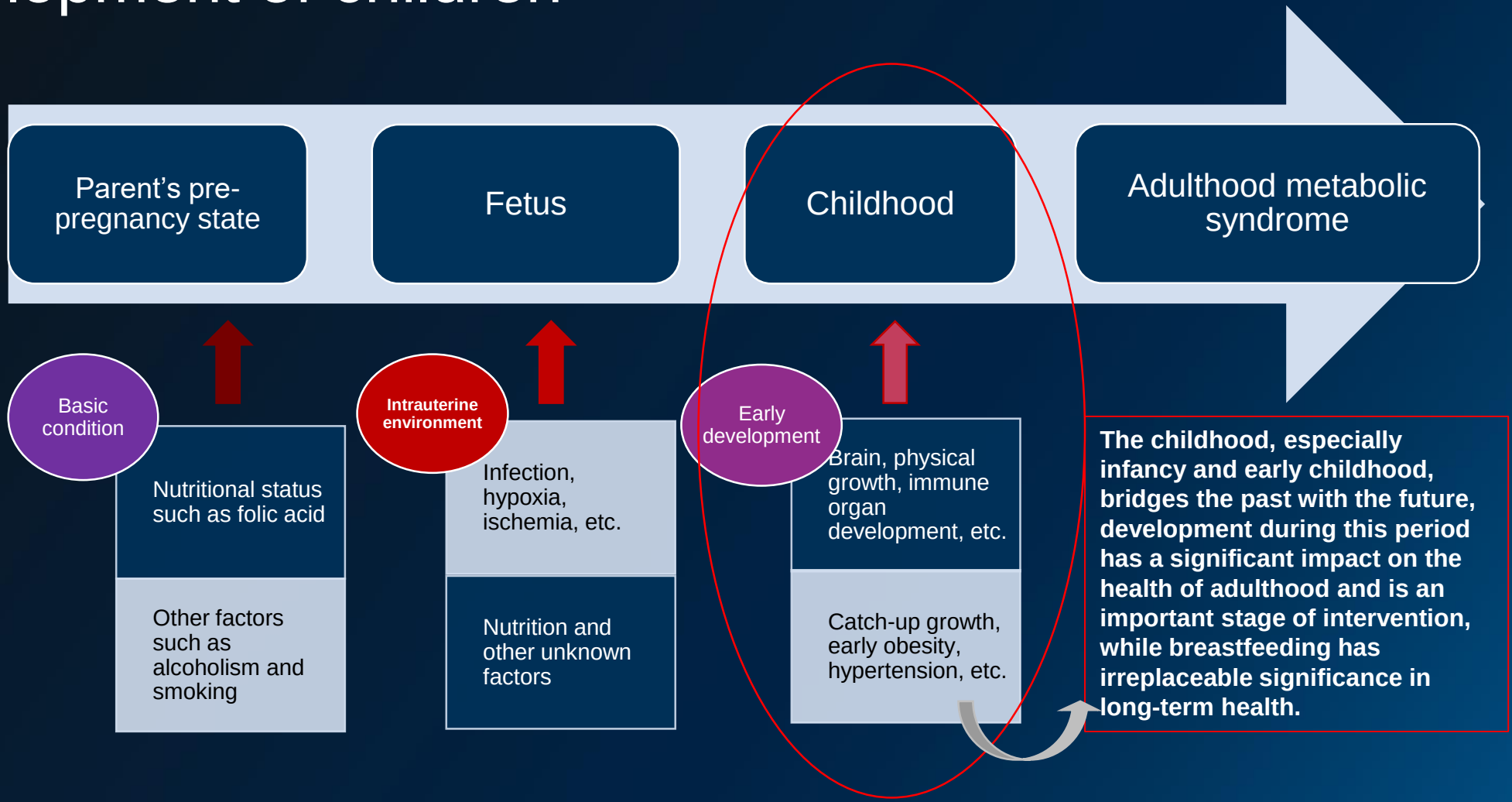
Breastfeeding is crucial for early and long-term development of children



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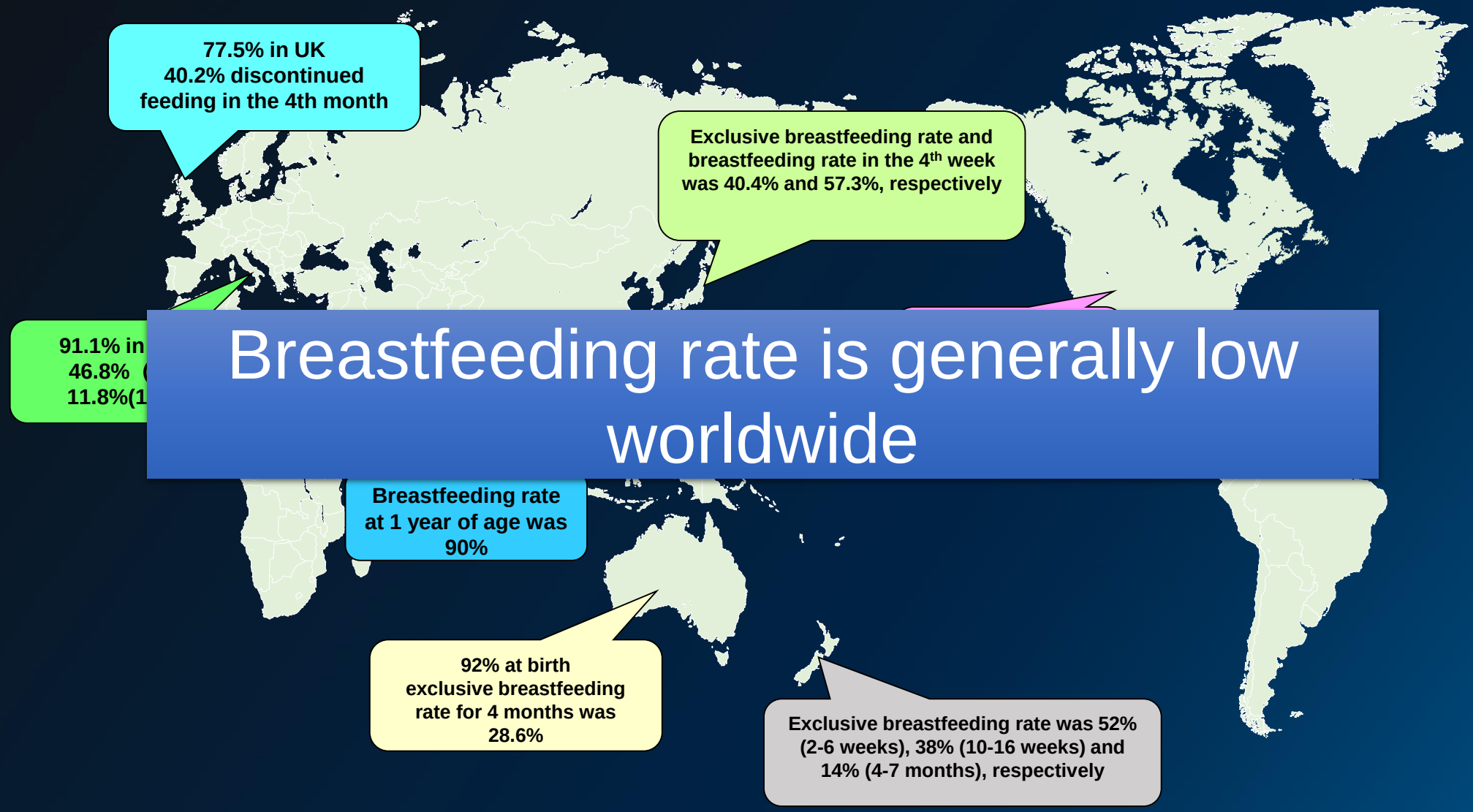
Breastfeeding can reduce the morbidity of a variety of diseases in children (examples)

Disease conditions	Reducible percentage of risks	Breastfeeding	Remarks	ORC	95% CI
Otitis media	23	Mixed feeding	—	0.77	0.64–0.91
Otitis media	50	≥ 3 months or 6 months	Exclusive breastfeeding	0.5	0.36–0.70
Recurrent otitis media	77	Exclusive breastfeeding≥6months	When compared with breastfeeding for 4-6 months	1.95	1.06–3.59
Upper respiratory tract infection	63	≥6 months	Exclusive breastfeeding	0.3	0.18–0.74
Lower respiratory tract infection	72	≥4 months	Exclusive breastfeeding	0.28	0.14–0.54
Lower respiratory tract infection	77	Exclusive breastfeeding≥6months	When compared with breastfeeding for 4-6 months	4.27	1.27–14.35
Asthma	40	≥ 3 months	With a family history of allergies	0.6	0.43–0.82
Asthma	26	≥ 3 months	Without a family history of allergies	0.74	0.6–0.92
Respiratory syncytial virus bronchiolitis	74	≥4 months	—	0.26	0.074–0.9

Meta-analysis conducted by U.S. Department of Health and Human Services: Agency for Healthcare Research and Quality



Breastfeeding rate is generally low worldwide

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Exclusive breastfeeding situation in China is alarming

- According to UNICEF reports, the annual number of newborns in China was ~16 million. In 2012-2014, exclusive breastfeeding rate for 6 months was **28%** in China, without any increase in 3 years

- In a multicenter study involving 30 Chinese provinces in 2016, exclusive breastfeeding rate was only **20.8%** for infants aged 6 months and **11.5%** for infants aged 12 months

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Why the breastfeeding rate continues to decline?

Outcome of economic development

- Mothers return to workplace
- Lack of breastfeeding facilities

Lacking effective guidance of the mothers

- Postpartum depression
- Delayed initial lactation
- Insufficient milk secretion

Manufacturer's excessive promotion of milk products

- Misguidance that "The formula is better than human milk"

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Serious challenges in improving breastfeeding of Chinese infants

- Recognize the importance of breastfeeding to the health of the next generation
- Strengthen basic research on breast milk
- Enhance policy guidance and public education
- Relevant medical staffs make persistent efforts to improve breastfeeding; standardize breastfeeding-related medical practice and pediatricians continue to follow up
- Provide breastfeeding families with firm support, strengthen confidence in breastfeeding, and help address the difficulties and problems in breastfeeding (social, medical and family)

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Measures of the WHO to increase breastfeeding rate

- WHO/UNICEF held a meeting in Inocenti, Florence, Italy in 1990, and issued the "Inocenti Declaration"; and Inocenti's Declaration on Infant and Young Child Feeding in 2005
- Protecting, promoting and supporting breastfeeding became the focus
- Proposal: Ten measures for successful breastfeeding, and implementation of the "International Code of Marketing of breast milk substitutes", etc.

Measures of China to increase breastfeeding rate

Department of grass-root guidance, National Health and Family Planning Commission

"Accelerating the construction of breastfeeding facilities":
By the end of 2018, public places should be equipped with breastfeeding facilities (airports, major railway stations, etc. in provincial capital city), the allocation rate should be greater than 80%;
By the end of 2020, all public places and work places should be equipped with basically standardized breastfeeding facilities

Presidential Decree of the People's Republic of China

"Advertising Law of the People's Republic of China":
Article 20: Advertisements of milk products, beverages and other food products that claim partial or full substitution of breast milk are forbidden in the mass media or public places.

中華醫學會 CHINESE MEDICAL ASSOCIATION

Evidence-Based Guideline for Breastfeeding Promotion Strategy in China

Evidence-Based Guideline for Breastfeeding Promotion Strategy (2018)

- The first Evidence-based guideline for breastfeeding promotion strategy in China
- Multidisciplinary collaboration-perinatal, neonatal, child health, nutrition, digestive, immune, CDC, evidence-based medicine persons have strong systematic features, it is necessary to implement by stages and stress the bridging efforts
- Focus on operability and popularity
- The Guideline is targeting on healthy infants, mothers or infants with related problems
- It should not only refer to the effective international and domestic practical experience but also combine with the actual situations of contemporary China

Timetable set in the First "Evidence-Based Guideline for Breastfeeding Promotion Strategy " in China

Contents	Deadline
Communication meeting on the formulation of "Evidence-based guideline" determines the contents of this outline	September 18, 2016
Search literatures by keywords	March 30, 2017
All documents were graded and processed according to Grade rating method	August 30, 2017
Write the draft, upload the first draft, initially review of the draft	October 8, 2017
Hold the second draft review meeting	November 4, 2017
Hold the third draft review and finalization meeting	January 27, 2018
Finalization	February 7, 2018

Formulation Process of the First " Evidence-Based Guideline for Breastfeeding Promotion Strategy " in China

(1) Construction of clinical issues

The construction followed the “PI(E)CO” principle that were employed during clinical study design, the construction issues included preparation for breastfeeding during pregnancy and lactation period, early establishment of breastfeeding measures, methods for assessment of breastfeeding efficacy, and handling of common breastfeeding-emergent problems.

(2) Retrieval of scientific evidence

Literatures were retrieved to address the construction issues. PubMed, Embase, Cochrane Library, CBM, CNKI and Wanfang Database were comprehensively searched; the retrieval period was between database creation date and July 1, 2017; the set languages were English and Chinese. A total of 10530 literatures were retrieved. After reading the titles and abstracts, followed by full text screening, 33 literatures were finally included.

Formulation Process of the First " Evidence-Based Guideline for Breastfeeding Promotion Strategy " in China

（3）Evidence assessment

GRADE assessment tool was used to evaluate the evidence, the quality of evidence was divided into 4 levels, including "high, medium, low and very low", while the strength of recommendation was divided into 2 levels, including "strongly recommended and weakly recommended". RCT and diagnostic accuracy study initiation were used as high-quality evidence, while observational study initiation (e.g.: cohort studies, cross-sectional studies, case-control studies, case series reports and case reports) were used as low-quality evidence.

The factors that reduced evidence quality were as follows: ① Study limitations: According to different types of study design, the corresponding methodological quality assessment tools were used, RCT was assessed with Cochrane risk bias assessment tool; cohort studies and case-control studies were assessed with Newcastle-Ottawa Scale (NOS); cross-sectional studies were assessed with AHRQ Scale; case series studies were assessed with Canadian Institute of Health Economics: critical appraisal tools for case series studies); ② Inaccuracy (small sample size, low occurrence of outcome events and wide confidence interval for effect estimates); ③ Inconsistency (clinical heterogeneity and statistical heterogeneity); ④ Indirectness; and ⑤ Publication bias.

The factors that improved evidence quality were as follows: ① The effect value was great; ② Possible confounding factors reduced the efficacy; ③ Dose-effect relationship.

Formulation Process of the First " Evidence-Based Guideline for Breastfeeding Promotion Strategy " in China

(4) Formation of recommendations

The strength of recommendations mainly took evidence quality and relationship between pros and cons into account, while patient's preferences and values, the cost of interventions, and the availability of resources are also taken into account. During the development of this guideline, Delphi voting method was employed for issues that were difficult to find evidence during literature search or evidence quality was too low to adopt.

(5) Writing the first draft and external review

The draft guideline was written according to the requirements. After the formed draft was sent to external experts for review, revisions were made according to review comments.

(6) Dissemination, implementation and evaluation of the guideline

CPS and CSPM of the CMA not only monitored the outcome indexes and performance of the recommendations of this guideline but also compared and analyzed the baseline measurements and post-interventional results according to the guideline.

(7) Update of the guideline

The planned update of this guideline was once every 3-5 years.

Analysis of the level of literature evidence cited in "Evidence-Based Guideline"

GRADE level of evidence and strength of recommendations

Level	Strongly recommended (1)	Weakly recommended (2)
High quality (A)	In most cases, the recommendations apply to most patients; the estimates are certainly close to the true value.	The optimal decisions vary with the environment, patients and social value; the estimates are certainly close to the true value.
Medium quality (B)	In most cases, the recommendations apply to most patients; the estimates may be close to the true value, but it may also vary significantly.	In some cases, the alternative protocol may be better for some patients; the estimate may be close to the true value with medium confidence, but it may also vary significantly.
Low quality (C)	When there is evidence of higher quality, the recommendations may change; confidence in the estimates is limited, the estimates may vary significantly from the true value.	Other alternative protocols are equally rational; confidence in the estimates is limited, the estimates may vary significantly from the true value.
Very low quality (D)	When there is evidence of higher quality, the recommendations may change; this is nearly no confidence in the estimates, it is very likely that the estimates vary significantly from the true value.	Other alternative protocols are equally rational; this is nearly no confidence in the estimates, it is very likely that the estimates vary significantly from the true value.

Main contents of the First " Evidence-Based Guideline for Breastfeeding Promotion Strategy " in China

This guideline involves 3 important departments, including obstetrics, neonatology and pediatrics, it provides specific recommendations and suggestions for common problems encountered in different departments

Obstetrics

- Preparations for pregnancy and lactation period
- Insufficient secretion of breast milk
- Crater nipple
- Mammary duct obstruction and mastitis
- Pregnancy/lactation depression
- Follow-ups
- Vaccination during pregnancy and breastfeeding

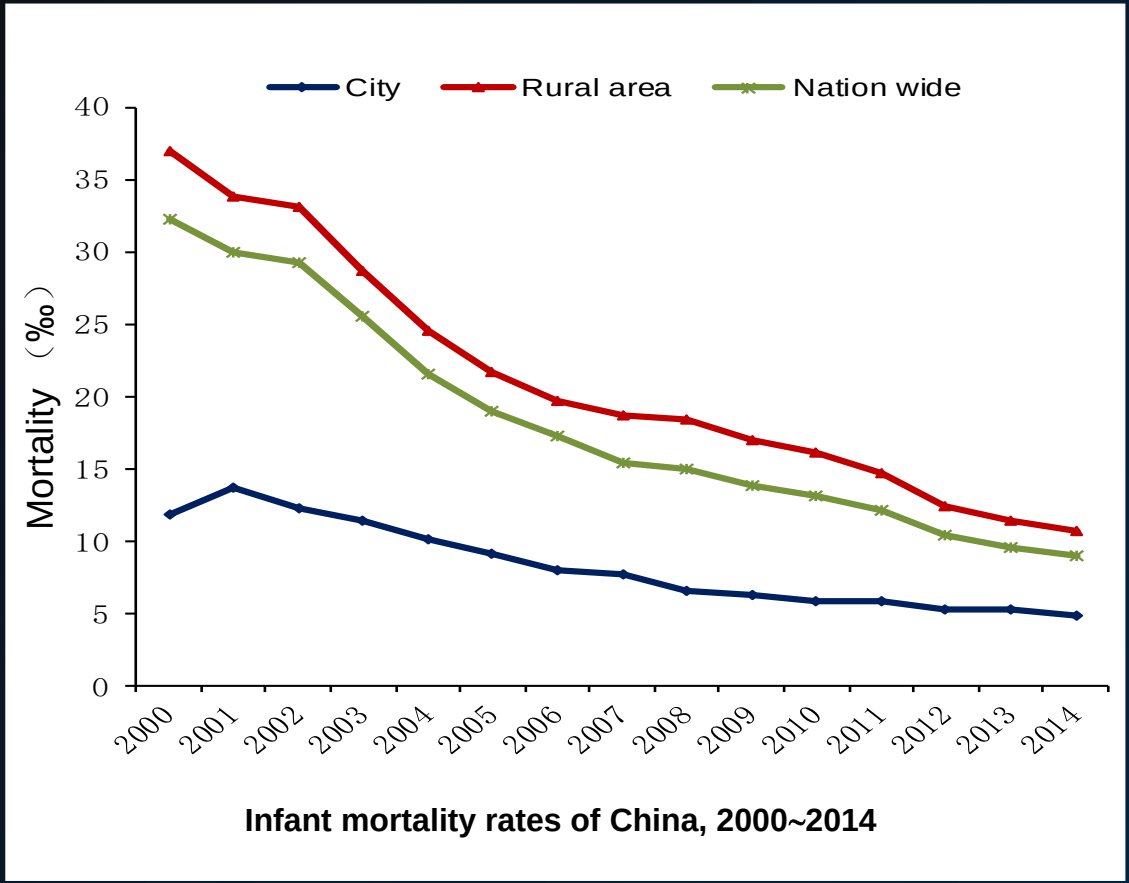
Newborns

- Intervention measures to promote early breastfeeding
- Early milk secretion
- Skin contact
- Mother and infant share the same room
- How to prevent and intervene with neonatal hypoglycemia
- Breast milk-related jaundice

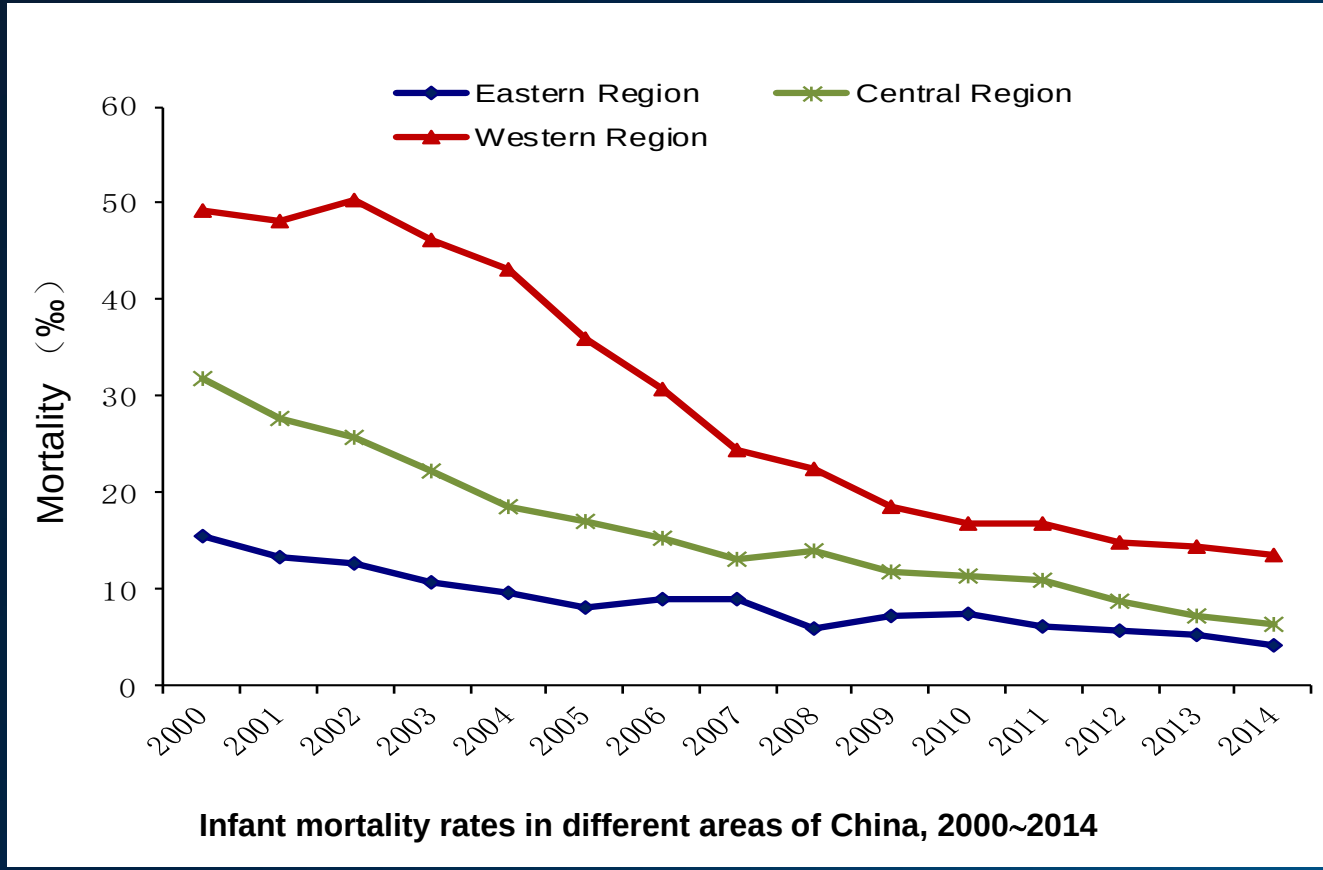
Pediatrics

- Assessment of breastfeeding efficacy
- Application of growth curve
- Human Breastfeeding Assessment Scale
- Handling of common feeding problems
- Insufficient breast milk
- Allergy to milk proteins
- Insufficient growth

Living Conditions of Children in China Greatly Improved
Mortality rate greatly decreased in the past 25 years, infants



Infant mortality rates of China, 2000~2014



Infant mortality rates in different areas of China, 2000~2014

Year 2000 to 2014, infant mortality decreased from 32.1‰ to 8.9‰，west part still in 13.5 ‰
（national maternal and child health monitoring report, 2014）

Significance and prospect

- The first evidence-based guide on breastfeeding promotion strategy in China has important historical and practical guiding significance
- The issuance provides great scientific support to MOH promotion action
- Nationwide lecturing tours and media and will be arranged to reach grass-root obstetricians and pediatricians
- Improvement in breastfeeding rate requires concerted and persistent efforts of all sectors in the society

Thank you very much!

If love is flowers, you are the seeds.
We together can make a happier world for our kids.