











SOCIO-ECONOMIC IMPACT OF GLOBAL CRISES IN MONGOLIA 21 NOVEMBER 2022 | WORKSHOP

Multiple micronutrient, vitamin A and D availability

L. Munkhjargal, Nutrition officer, UNICEF Mongolia N. Bolormaa, MD, MSc, National centre for Public health

Micronutrient supplementation program in Mongolia

2000

- Health Minister's order #74
- High dose vitamin A and D supplementation (High dose vitamin A supplementation for lactating women and children 6-59 mos, and Vitamin D for 0-59 mos)

2009

- Health Minister's order #321
- MMN supplementation for pregnant and lactating women and children 6-23 mos

2013

- Health Minister's order #470
- High dose vitamin A and D supplementation (High dose vitamin A supplementation for children 6-59 mos, and Vitamin D for 0-36 mos)

2020

- Health Minister's order #490
- Vitamin and mineral supplementation (High dose vitamin A and MMN for women and young children)

Micronutrient availability assessment protocol

Background: The micronutrient availability assessment is underpinned by a framework that represents multiple micronutrients (MMN), vitamin A and D availability through supply chain in health service.

Objectives:

- Identify current supply gaps and supply chain bottlenecks for micronutrient supplementation.
- Identify barriers that prevent young children, pregnant and lactating women to access micronutrients (MMN, vitamin A and D)
- Identify micronutrients (vitamin A, D and MMNs) availability in the market, their prices

Micronutrient availability assessment protocol

1. Key informant interview

 Head of Family, Soum and Village health centres, Head of public health division of Local health departments, and officers in charge for medicine supply and distribution.

2. Interview of women and child caretakers

- Demographic information
- Use of vitamin and mineral supplementation, and related barriers that prevent use of vitamin A, D and MMNs

3. Pharmacy study

 Identify micronutrients (vitamin A and D, complex micronutrients) availability in the market, and their retail prices

Multiple micronutrient availability in health care facilities

- Soum, Family and Village health centers 79 (Rural–74.7%, Urban–25.3%)
- No available stock -44.3%
- Available MMN for women or children (either one) – 36.7%
- Available MMN stock (both women and children) – 19%

Procurement of MMNs		2021		2022	
		n	%	n	%
1	Announced bidding	45	56.9	16	20.3
2	No bidding	30	38.0	46	58.2
3	Distributed from HD	4	5.1	-	
4	Available stock			17	21.5

51.9% of primary healthcare facilities include actions to provide MMNs for pregnant and lactating women and young children in their plan of action.

Multiple micronutrient availability in health care facilities

• Since 2019, majority of primary healthcare facilities are started procurement of MMNs by using basic budget estimated per citizen.

Regular supply of MMNs		Interview results						
		2020		2021		2022		
		n	%	n	%	n	%	
1	MMP for children	57	72.2	56	70.9	37	46.8	
2	MMN for women	46	58.2	46	58.2	32	40.5	

Availability of MMNs		Results from personal inspection by nominated assessors		
		n	%	
1	Stock of MMP for children	38	48.1	
2	Stock of MMN for women	30	38.0	

Use of micronutrient supplementation

Use of MMN tablets received from Health center free of charge

Pregnant women (n=197)

- Regular distribution 9.4%
- Irregular distribution 20.5%
- 9.6% (n=19) of pregnant women were used MMNs in accordance with Guideline on MMN supplementation.

Use of vitamin and mineral supplements purchased from pharmacies

Pregnant women (n=197)

- Yes 26%
- No -6.1%
- Don't know/not answered 67.9%
 - Elevit,
 - Prenatal,
- Iron and folic acid,
- Iron and folic acid + vitamin D+ Elevit and/or prenatal
- Calcium + vitamin D

Expenditure for these supplements purchase 30,000–120,000 MNT

Availability and use of high dose vitamin A

Health Minister's order #A/245, April, 2022 for distribution schedule for high dose vitamin A

Province HD

- Retinol palmitate 100,000 IU 38,582
- Retinol palmitate 100,000 IU 309,039

• City HD

- Retinol palmitate 100,000 IU 35,859
- Retinol palmitate 100,000 IU 144,772

No	Half year report (May 2022)				
	Age of children, in months	Number of children	Number of children received supplements	% children received supplement	
1	6-11 months	73,941	61357	83.0	
2	12-59 months	453,811	334.484	73.7	
	Total	527,811	395,841	75.0	

Pharmacy market study

Pharmaceutical system

- Number of registered medicine 5,432
- Number of products on essential medicine list – 571
 - Retinol
 - Retinol palmitate 100,000 IU
 - Retinol palmitate 200,000 IU
 - Ergocalciferol (D₂ 50,000 IU)
 - Cholecalciferol (D₃ 400–1000 IU)

Number of products registered as a medicine

- Cholecalciferol and complex medicine containing it – 24
- Retinol and complex medicine containing it – 10

Information resource http://druginfo.mohs.mn

Pharmacy market study

Vitamin D retail price

- For young children (10–30–50 ml) -35,484 \mp (12,000–59,900 \mp)
- Children / adults (price per 1 tablet or capsule)
 - 50,000 IU 2,610
 - 5,000 IU − 497,1¥
 - 4,000 IU 383,3
 - $2,000 \text{ IU} 379,1 \mathbb{F}$
 - 1,000 IU 481,4\brace{\pi}

Vitamin and mineral complex

- For children
 - Vitamin D (200-400 IU) and Calcium – 25,462.5₹ (№30-120, 13,500-39,900₹)
 - Multivitamin 26,787.5₮ (Syrup: 50-200 ml, 7,800-44,500₮)
 - Multivitamin 34,125₮ (№30-240; 3,100-63,500₮)
- For women
 - Multivitamin 49,324₹ (№30-100; 17,600-109,500₹)

Thank you for your attention