

Vitamin A deficiency during pregnancy

Talat Toor

11th Postgraduate Course in Reproductive
Medicine and Reproductive Biology

HUG-WHO

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Pakistan



Official Name: Islamic Republic of Pakistan
Location: Latitude - 24° and 37° N
Longitude - 62° and 75° E
Total Area: 803,950 sq. km. (Including FATA & FANA)
Total Population: 130.58 million (1998 Census)
State Religion: Islam
National Language: Urdu
Monetary Unit: Pakistani Rupee
National Dress: Shalwar Kameez
National Flower: Jasmine
National Game: Hockey



Flag

BASIC FACTS OF PAKISTAN



Vitamin A

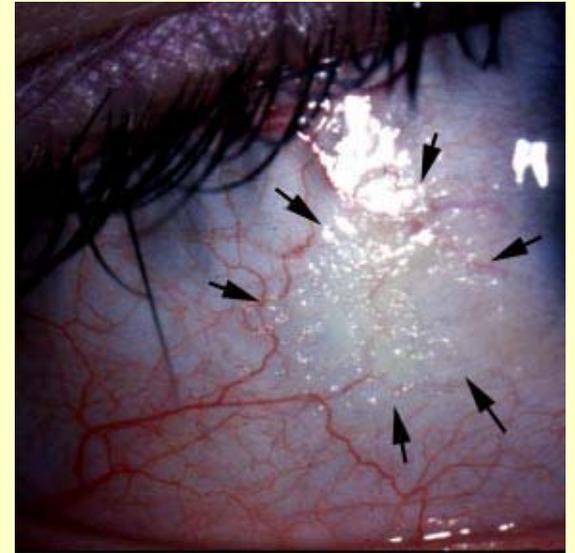
- Vitamin A is an important micronutrient, which has important influence on the health of pregnant women and the fetus
- Two compounds are related to Vitamin A:
 - Retinoids (Active Vitamin A)
 - Provitamin (Precursors of Vitamin A)

Introduction

- Vitamin A deficiency
- Public Health importance
- Recommended dietary allowances
- Interventions

Vitamin A deficiency

- Sub clinical
 - serum retinol levels
- Clinical
 - night blindness
 - Bitot's spots
 - Xerophthalmia
- Health consequences



Public Health Relevance

- Vitamin A deficiency is a major health problem.
- 25-50 million children suffer from Vitamin A deficiency.
- Vitamin A deficiency during pregnancy is associated with increased mortality and morbidity in mothers and infants.



Recommended Dietary Allowance

	Adult women 25-45 years	Pregnant women 3rd trimester	Lactating women	Percentage increase over non-reproducing adult women		
				Pregnancy	Lactation %	
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•						
•						
•						
•						
•						
•	Vitamin A	800	800	1300	0	33

How can we prevent vitamin A deficiency?

- By Public Health measures through appropriate, acceptable, affordable and available programs.
- Dietary diversification, food fortification and supplements.

Objectives

- To determine the maternal and perinatal consequences of vitamin A deficiency
- To review the strategies to eliminate and prevent vitamin A deficiency

Methods

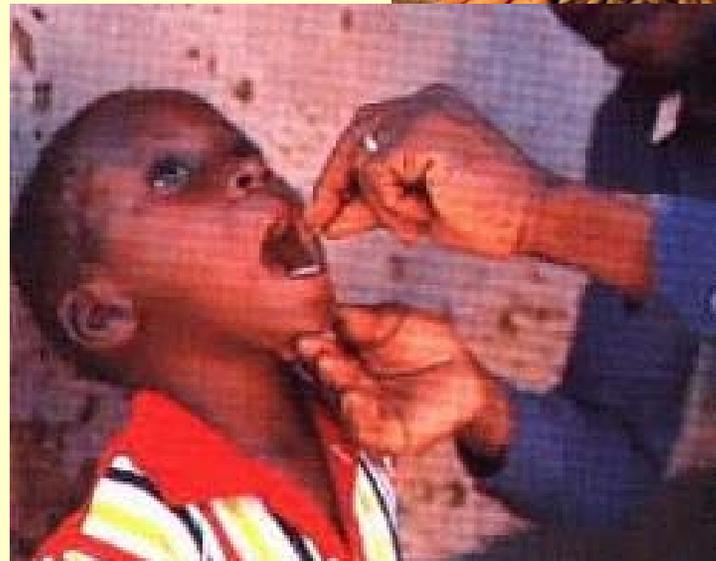
- Papers identified through:
 - Medline (key words)
 - References
 - Book chapters
- Papers selected:
 - biological information
 - public health
 - evidence of effectiveness of interventions

Results

- Importance of vitamin A for maternal health
- Vitamin A deficiency and maternal morbidity
- Vitamin A deficiency and maternal mortality
- Vitamin A deficiency and perinatal health

Interventions to prevent Vitamin A deficiency

- Diet diversification
- Supplementation
- Food fortification



Conclusions

- Vitamin A is a serious problem throughout the developing world.
- Adequate maternal Vitamin A nutrition is essential.
- Vitamin A deficiency can produce clinical signs such as night blindness and ocular lesions.
- Vitamin A deficiency is a preventable disease

Conclusions

- The principal challenges include:
- Sustaining global and national commitment to elimination
- Embedding successful control strategies into community systems so that they are sustainable.
- Increasing dietary intakes of young children, pregnant and lactating women to adequate levels.
- Educating the medical profession and general public
- Educating mothers about the importance of adequate intake of vitamin A and its locally available sources for menu planning.