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CLINICAL & NUTRITIONAL STATUS OF WOMEN AND PRESCHOOL CHILDREN

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Abstract

Clinical assessment of a community provides valuable information to the public health worker especially in regions of the world where malnutrition is wide spread. Out of 700 women studied prevalence of clinical symptoms like angular stomatitis, chelosis, bleeding gums and dryness of skin were 34.8%., 31.0% , 42.8%, and 44.2% respectively.   72% of women and 31% of preschool children were also found to be anaemic .

Introduction

Clinical examination is an important practical method for assessing the nutritional status of a community. Clinical assessment of a community gives valuable information especially in regions where malnutrition is wide spread hence a clinical examination was conducted among the fisher women and preschoolers in the study area. The method for clinical examination was based on examination for changes, believed to be related to inadequate nutrition that can be seen or felt in superficial epithelia tissues, especially the skin, eyes, hair and buccal mucosa, or in organs near the surface of the body, such as parotid and thyroid glands.

Methodology

Signs and symptoms considered for the assessment of nutritional status are provided in the following table.

Table :Signs and symptoms to asses nutritional status

Sl No.		Signs known to be of value in nutrition survey.
1	Hair	Lack of lustre Thickness & sparseness Straightness Dyspigmentation Flag sign Easy pluckability

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SI No.		Signs known to be of value in nutrition survey:
2	Face	Diffuse depigmentation Naso-labial dyssebacea Moon face
3	Eyes	Pale conjunctiva Biotots spots Conjuctival xerosis Corneal xerosis Kerotamalicia Angular palpebritis
4	Lips	Angular stomatitis Angular scar Chelosis
5	Tongue	Oedema Scarlet and raw tongue Magenta tongue Artrophic papillae
6	Teeth	Moltted enamel
7	Gums	Spongy ,bleeding gums
8	Glands	Thyroid enlargement Parotid enlargement
9	Skin	Xerosis Follicular hyperkeratosis-Type 1&2 Pellagrous dermatitis Scortal &Vuval dermatitis
10	Nails	Koilonychia
11	Subcutaneous tissue	Oedema Amount of subcutaneous fat
12	Muscular and skeletal systems	Muscular wasting Craniotabes Frontal &parital bossing Epiphyseal enlargement Beading of ribs Persistently open anterior fontanella Knock-Knees or bow legs
13	**Internal systems** a) Gastro-Intestinal	Hepatomegaly
	b) **Nevorous system**	Psychomotor change Mental confusion Sensory loss Motar weakness Loss of position sense Loss of vibratory sense Loss of ankle &knee jerks Calf tenderness **Cardiac enlargement**
	c) Cardio vascular	**Tachycardia.**

Clinical signs:

Clinical examination has always been and remains an important practical method of assessing the nutritional status of a community. Essentially the method is an examination for changes, believed to be related to inadequate nutrition, that can be seen or felt in superficial epithetical tissues especially the skin, eyes and hair etc. (Jelliffe, 1966).

Results and Discussion:

Prevalence rates of clinical nutrition deficiency signs noted in pre school children are provided in table 1 & 2. The results are available only for Andhra Pradesh & Karnatak. Only prevalence of anaemia was assessed in Kerala.

Table 1: Prevalence rates (%) of Clinical nutritional deficiency signs in women .

SI No.	State	Sample surveyed (no)	Anaemia	Angular stomatitis	Chelosis	Bleeding gums	Dryness of skin
1	Andhra Pradesh	490	80.0	27.1	16.3	15.5	29.8
2	Karnataka	210	84.4	42.4	45.7	70.0	58.6
3	Kerala	215	42.8	-	-	-	-
4	Tamilnadu	-	-	-	-	-	-
5	Overall Total	915	69.2	34.8	31.0	42.8	44.2

Note :Figures given are Prevalence rates in (percentage). Results are not available for Tamilnadu
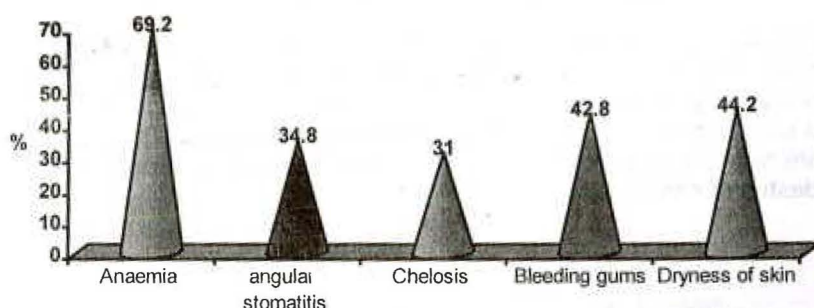

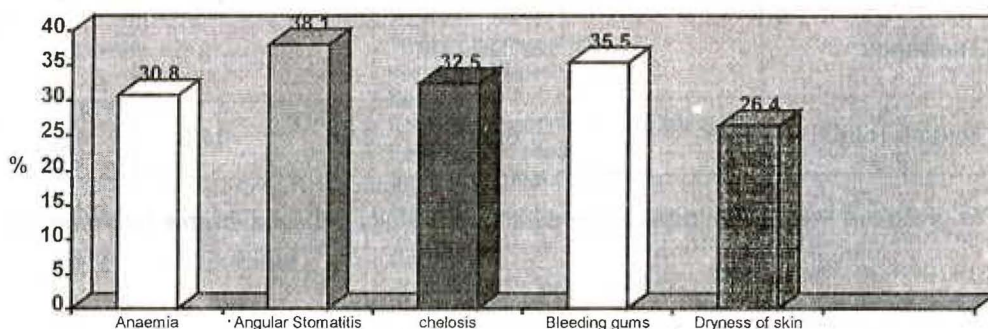**Fig. 1: Prevalence rates of clinical symptoms observed in women**

It was observed that out of the 915 women surveyed for clinical symptoms 69.2 % were anemic. Out of 700 women observed for other clinical symptoms, prevalence rates of angular stomatitis, chelosis, bleeding gums and dryness of skin respectively were 34.8%, 31% , 42.8% and 44.2%. Prevalence of anaemia was very high in both Karnataka and Andhra Pradesh. Bleeding gums and dryness of skin were higher in Karnataka fig 1.

Preschool children: Details of clinical forms of malnutrition prevalence in preschool children are provided in table 2.

Table 2   Prevalence rates of clinical symptoms observed in preschool children

SI .no.	State	Sample surveyed(no)	Clinical symptoms				
			Anemia	Angular stomatitis	Chelosis	Bleeding gums	Dryness of skin
1	Andhra pradesh	343	38.8	40.2	29.4	31.2	18.4
2	Karnataka	186	49.5	36.0	35.5	39.8	34.4
3	Kerala	215	04.2	-	-	-	-
4	Tamilnadu	work not attempted		-	-	-	-
5	**Overall**	**744**	**30.8**	**38.1**	**32.5**	**35.5**	**26.4**

Note :Figures indicate prevalence rates (percentage)

Fig. 2 Prevalence rates of clinical symptoms observed in pre school children
It was observed that 31 % of the pre school children were anaemic.   Out of 529 children observed 38 % had angular stomatitis 32.5 % had chelosis, 35.5 % had bleeding gums and 26.4 %. had dryness of skin depicted in figure(fig2) above aneamia as well as bleeding gums, dryness of skin and chelosis are high in Karnataka followed by Andhra Pradesh. Angular stomatitis was higher both in Andhra Pradesh and Karnataka.

Conclusion

It was found that 69.2 % of women were anaemic.   Other clinical symptoms observed were angular stomatitis ,chelosis , bleeding gums and dryness of skin. They are between 25-30 %.

In case of preschool children, 31 % were observed anaemic . The other clinical symptoms like angular stomatitis, chelosis and dryness of skin   were also observed but the % of children with these symptoms were 35 % on an average . The reason for high anaemia might be due to low consumption of iron rich foods, maintenance of poor health, hygiene & sanitation and also it might be due to lack of nutritional awareness .