

## Prevalence of Anaemia in Scheduled Caste Children of Mahl Village in Amritsar District of Punjab

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**KEY WORDS** Haemoglobin Status. Anaemia. Scheduled Caste Children.

**ABSTRACT** The present study in the first comprehensive report on haemoglobin status of scheduled caste children of Mahl village of Amritsar district in Punjab. Out of 276 children tested for their haemoglobin status only 4.3 per cent were normal and 95.65 per cent were affected with various grades of anaemia. Frequency of severe anaemia is higher in age group 2.00-2.99. Thereafter the frequency of anaemia decreases as the age increases.

### INTRODUCTION

The most vulnerable period next to infancy is the age of 1-6 years. The main reason for this vulnerability is easy susceptibility to malnutrition and infection. Childhood malnutrition is responsible for nearly half of the childhood deaths (Puffer, 1973; Ghai, 1993).

Among nutritional disorders affecting children in India, anaemia is the most common and is largely responsible for high rate of mortality and morbidity among poor children (Sidhu et al., 1993). The results of community surveys (Rao et al., 1954; Visverswara Rao, 1980; Swaminathan et al., 1960; UNICEF, 1993; Sidhu, 1996) have shown that 50 per cent of toddlers in the poor socio-economic groups in India are anaemic.

Sachar et al. (1990) reported that nutritional status of the children in rural areas of Punjab remained unchanged and no significant difference was seen despite the tremendous development during the period 1980-1990.

In the present study an attempt has been made to determine the prevalence of anaemia among the scheduled caste children of Punjab. In the constitution of the Indian Republic, the term scheduled castes has been accorded to the

people who used to belong to lower caste and were considered untouchables. The scheduled castes of Punjab cover a wide range of populations like Harijans who are either Sikhs or Hindus and the groups who are no longer nomads. Socio-economic status of scheduled castes is very much lower than that of the other population of Punjab.

### MATERIALS AND METHODS

The present study has been conducted on 276 scheduled caste (Sikh Harijans) children ranging in age from 2 to 8 years. The data have been collected from Mahl village of Amritsar district of Punjab from the month of October to December in 1995. Various scheduled caste localities in the village were visited for the data collection.

In the present study, cyanmethaemoglobin method (INACG, 1985) has been used to determine the concentration of haemoglobin. The classification of severity of anaemia in the present study is based on the level of Haemoglobin in blood (WHO, 1989).

Severity of anaemia	Haemoglobin level
Mild	10-11 g/100ml
Moderate	7-10 g/100ml
Severe	<7 g/100ml
Normal	> 11 g/100ml

### RESULTS AND DISCUSSION

It is apparent from table 1 that out of 276 children studied only 12 (4.35%) are normal and 264 (95.65%) are affected with various grades of anaemia. 9.80 per cent children are affected with mild anaemia, 64.86 per cent with moderate anaemia and 21 per cent suffer from severe anaemia.

**Table 1 : Prevalence of anaemia in Scheduled Caste children of Punjab**

Age group (in years)	No. of children surveyed	Normal		Prevalence of anaemia					
		No.	%	Mild		Moderate		Severe	
				No.	%	No.	%	No.	%
2.00 - 2.99	44	-	-	1	2.30	24	54.50	19	43.20
3.00 - 3.99	55	3	5.50	3	5.50	30	54.50	19	34.50
4.00 - 4.99	49	1	2.00	5	10.20	34	69.40	9	18.40
5.00 - 5.99	41	3	7.30	5	12.20	28	68.30	5	12.20
6.00 - 6.99	46	1	2.20	7	15.20	28	68.30	5	10.90
7.00 - 7.99	41	4	9.80	6	14.60	30	73.20	1	2.40
<b>Total</b>	<b>276</b>	<b>12</b>	<b>4.35</b>	<b>27</b>	<b>9.80</b>	<b>179</b>	<b>64.86</b>	<b>58</b>	<b>21.00</b>

Sidhu (1996) studied scheduled caste children of Faridkot district of Punjab and reported that 55% children affected with various grades of anaemia. Narasinga Rao (1981) reported that 77% pre school children of poor rural communities suffer from anaemia. Indian Council of Medical Research (1977) determined the magnitude of anaemia among preschool children in different parts of the India and reported that 53% of children suffer from anaemia. Thus it is clear from the present data that anaemia is widely prevalent among scheduled caste children than the other populations of India.

It is quite apparent from the present sample (Table 1) that there was an age differential in the prevalence of anaemia. A high proportion (43.20%) of children were severely anaemic in the age group of 2.00-2.99 years as compared to older age groups. The frequency of anaemia decreases as the age increases. Visweswara Rao and Gopalan (1969), ICMR (1977), Visweswara Rao (1980) and Sidhu (1996) also reported that frequency of anaemia is higher in younger age groups. This frequency of anaemia among younger age groups may be due to higher dietary inadequacy of all nutrients including iron in the younger age groups than in older age groups. Because of poor knowledge on the part of the mother regarding nutritional requirements of the baby, the period between 1-3 years if one of the perpetual hungers among scheduled caste population. Poverty is an important limiting factor for bringing enough food but the rampant malnutrition is not all due to poverty. There is wide spread ignorance about nutrition.

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