

LITERACY STATUS IN THALASSEMIC PATIENTS FROM SOLAPUR DISTRICT, MAHARASHTRA, INDIA: A STATISTICAL STUDY

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ABSTRACT

The present survey includes studying the literacy status in thalassaemic patients from Solapur District, Maharashtra, India during June 2008 to December 2011. This article comprises the questionnaire/interview survey of 125 patients. The majority (>22.4%) of thalassaemia patients were illiterate with only 1.6% with a higher education. To coup with the situation, efforts to increase the literacy rate and awareness of the disease are urgently required.

KEY WORDS: Education, literacy, statistical study, thalassaemia

INTRODUCTION

Thalassaemia is a group of genetic blood disorders characterized by a reduction or absence in the production of hemoglobin. It is not infectious and cannot be passed from one individual to the other by personal or any other contact, or through blood transfusion, food or air (Wikipedia, 2008). Thalassaemia is a major health problem, placing an immeasurable emotional, psychological and economic burden on millions of people around the World (Panos, 2005; Riewpaiboo et al., 2010). About 6,000 children are born with thalassaemia major each year, more than 30% of births with a major thalassaemia syndrome in South East Asia (Modell and Petrou, 1983). Madan Sharma et al. (1998), observed that 10% of the World incidence of Thalassaemia. The burden of haemoglobinopathies in India studied by Balgir (2000) and Vaz *et al* (2000), finds the distribution of BT mutations in the Indian population. Genetic epidemiology of the sickle cell anaemia in India observed by Balgir (2001). Nikam *et al.*, (2012a). Observed the geographical distribution and prevalence percentage, Mortality (Nikam et al., 2010), height and Weight correlation (Nikam *et al.*, 2012b), alloimmunization and HBsAg (Nikam *et al.*, 2011; Patil *et al.*, 2011) in thalassaemia and other patients from Solapur district, Maharashtra, India. The present study includes surveying the literacy status of thalassaemic patients from Solapur District, Maharashtra, India.

MATERIALS AND METHODS

Present survey study includes, 125 (Male =73, Female =52) clinically proved by their medical reports, cases of thalassaemic children's with age 6 months to 18 yr, coming for to get blood transfusion from different parts of Solapur district, Maharashtra State. The entire survey study was carried out under the observations of Medical officer from Thalassaemia transfusion centre, Indian Red Cross Society, Gopabai Damani Blood Bank, Solapur Maharashtra, India, from August 2009 to July 2010). The study population consisted of one hundred twenty five, cases of Thalassaemia children attending for regular blood transfusions in the following blood banks and hospitals collaborating in this multicentre study were carried out, with prior written consent from the parents/ guardians.

- 1) Indian Red Cross Society, Gopabai Damani Blood Bank, Thalassaemia Centre, Solapur.
- 2) Chatrapati Shivaji Rugnalaya, Government Hospital, Solapur.
- 3) Hedgewar Blood Bank, Solapur
- 4) M/s Indian Red Cross Society Blood Bank, Sub Branch Sou Sarjubhai Bajaj Blood Bank, Pandharpur, Dist- Solapur.
- 5) Shriman Rambhai Shah Blood Bank, Sub Branch, Indian Red Cross Society, Barshi, District- Solapur.

Geographical Distribution of Thalassaemia

The geographical regions of Solapur District, Thalassaemia analyzed (Figure -1) in the framework of this research work: i) Akkalkot ii) Barshi iii) Karmala iv) Madha v) Malshirus vi) Mangalveda vii) Mohol viii) North Solapur ix) Pandharpur x) South Solapur xi) Sangola xii) Solapur City. All individuals were non-related and their selection depended on their well-defined phenotypes, transfusion-dependency, and geographical origins.

Inclusion criteria:

The criteria followed for the inclusion of the patients for this study was;

1. Patient was known thalassaemic
2. Age at commencement of transfusion was more than six months
3. The interval between the transfusions was at least 3 weeks.
4. The age range of thalassaemia patients in our study was from 6 months to 18 yr.

The questionnaire interview was designed to collect information on the number of aspects from thalassaemic patients.

RESULTS AND DISCUSSION

The geographic distribution of thalassemia in Solapur District shown in Figure-1. The prevalence percentage of literacy status in thalassemic patients from Solapur District shown in Figure-2.

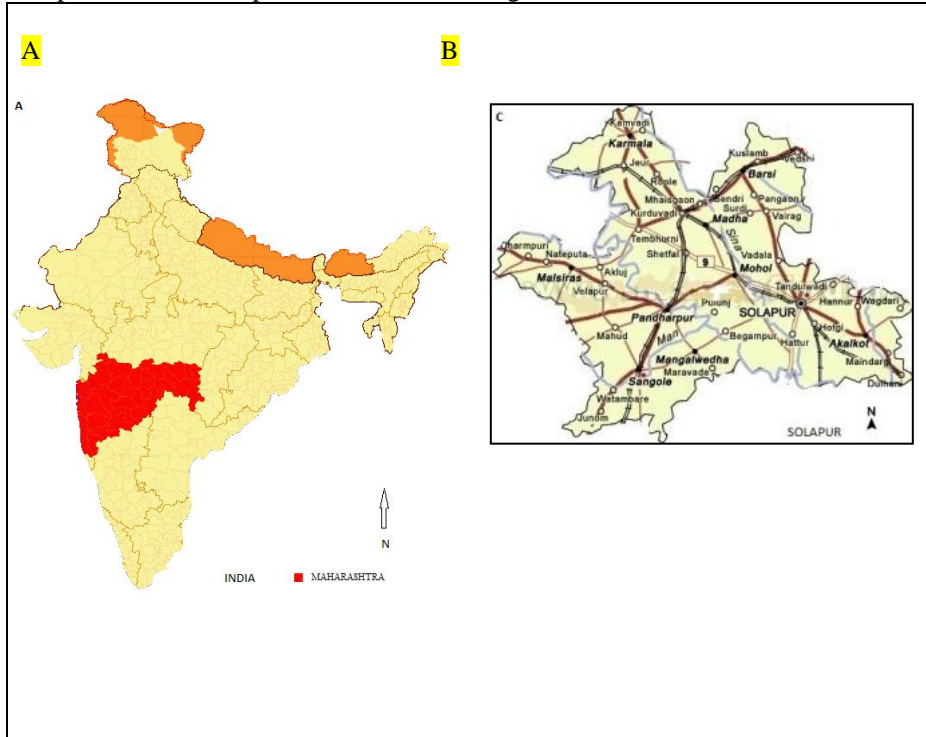


Figure- 1. Map of India; Red Color indicates Maharashtra State. B- Map of Solapur District, the geographical area of thalassemia in the framework of this research work.

Table-1. Showing the literacy in thalassemic patients.

Sex	Class	Male	Female	Total Male + Female (%)
Education	LKG	2	2	4
	UKG	1	1	2
	1 st	10	1	11
	2 nd	3	5	8
	3 rd	7	2	9
	4 th	4	1	5
	5 th	3	7	10
	6 th	4	7	11
	7 th	6	1	7
	8 th	0	3	3
	9 th	3	1	4
	10 th	5	2	7
	11 th	0	2	2
12 th	0	0	0	
	B.A -I	0	1	1
*Below 4 Yr Total %		6	10	16
Uneducated Total %+ Below 4 Yr		19 + *6 = 25	9 + *10 = 19	28 + *16 = 44
Educated Total %		48 (65.75)	33 (63.46)	81 (64.8)

*Below 4 years patients considered as uneducated

The literacy percentage (Table-1 and Figure-2) in thalassemia patients was: educated male 48(65.75%), female 33(63.46%) total 81(64.8%); below four yr male 6(8.21%), female 10(19.23%) total 16(12.8%); uneducated male 19(26.02%), female 9(17.30%) total 28(22.4%). The majority (>22.4%) of thalassemia patients were illiterate with only 1.6% with a higher education. General health education for those, suffering from thalassaemia, which will help prevention and spread of thalassemia (Qamruz and Salahuddin, 2006). According to our literature survey, this is first study, which is conducted in this respect, this study aimed to provide the knowledge and awareness to the people, about the general things, so that, they will be able to understand the severity of the thalassemia and the ways to protect the

new generation from the disease. As per the pedigree analysis of the patients observed, most of the parents were thalassemia minor.

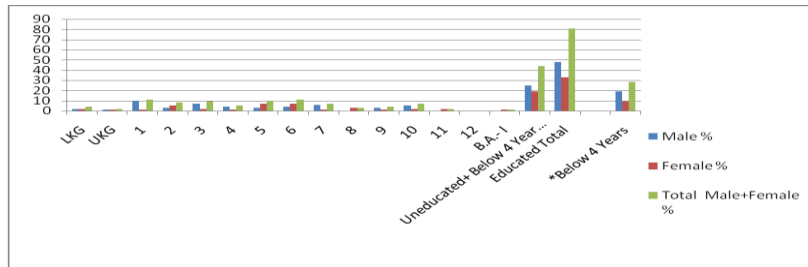


Figure-2. Showing the Literacy in thalassemic patients from Solapur District.

The present data analyzed with the reports of Pakbaz *et al.*, (2010), he observed the education and employment status of children and adults with thalassemia in North America. Due to lack of education, awareness and information, thousands of children with thalassemia are born each year and the number is growing day by day. No one can feel the pains of sufferings except thalassemic children themselves and their parents. Thalassemic and their parents are waiting for proper and uninfected blood transfusion, medication, laboratory tests and clinical management needed to erase the shadow of miseries and hanging sword of death on their heads.

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