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## EVALUATION OF THALASSEMIC INFORMATION AMONGST STUDENTS AND FACULTY MEMBERS OF A.D.I.T. CAMPUS (GTU/SPU), NEW V.V.NAGAR

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### ABSTRACT

*The prevalence and pattern of thalassemia and its related information amongst the students (undergraduate as well as postgraduate) and faculty members at the campus of New V.V.Nagar were evaluated using structured self-medication administered questionnaire. A total of 500 questionnaire were distributed in the college premises with respondent rate of 450(90%).majority of respondents, 73% were aged between 18-23 years, while 269(59.5%) were female and 181(40.5%) were male.*

*The survey was conducted in the colleges comprising of Ayurvedic, Biotechnology, Engineering and pharmacy. The survey comprised of 290 students (64.4%) including both undergraduate as well as postgraduate students. the rest were faculty members (26.6%) and administration incharge (8.8%). The questionnaire was prepared such that most information regarding thalassemia can be collected. It had questions regarding the awareness details, cause for the same and the need to know about thalassemia. The survey calculation resulted in different results like: majority of the people didn't donate blood(58%), almost all of them were aware(82%) about thalassemia due to awareness programs in the campus. Most of them said that tv advertisement(27%) and camps(23%) were responsible for the awareness.The public had mixed response on the spread and treatment of thalassemia.*

**KEYWORDS :** *Thalassemia ; Questionnaire ; Respondents ; Survey.*

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## INTRODUCTION

Thalassemia is a group of inherited autosomal recessive blood disorders that originated in the Mediterranean region. In thalassemia<sup>1,2,3,4</sup> the genetic defect, which could be either mutation or deletion, results in reduced rate of synthesis or no synthesis of one of the globin chains that make up hemoglobin. This can cause the formation of abnormal hemoglobin molecules, thus causing anemia.

Thalassemias usually result in underproduction of normal globin proteins, often through mutations in regulatory genes. Normal hemoglobin is composed of four protein chains, two  $\alpha$  and two  $\beta$  globin chains arranged into a heterotetramer<sup>5,6,7,8</sup>. Thalassemia patients produce a deficiency of either  $\alpha$  or  $\beta$  globin, unlike sickle-cell disease, which produces a specific mutant form of  $\beta$  globin. The thalassemias are classified according to which chain of the hemoglobin molecule is affected. In  $\alpha$  thalassemias, production of the  $\alpha$  globin chain is affected, while in  $\beta$  thalassemia production of the  $\beta$  globin chain is affected.

Thalassemia is a tricky disease. The person/child suffers<sup>9,10</sup> a lot as well as the family goes under too many stress due to the monetary requirement and the illness of their family member. Hence, this survey was carried out to increase the knowledge about the thalassemia.

## MATERIALS AND METHODS:

### 1. Experimental Procedure/Survey Method:-

Six colleges in campus were selected for the purpose of survey. The students consisted of varied fields like biotechnology, engineering, pharmacy and ayurvedic branch. With prior permission from the principal of respective colleges the survey was conducted in the college premises and the students were selected randomly. The survey format was prepared by the group, incorporating their thoughts and efforts.

### 2. Questionnaire :-

The format consisted of different thalassemic parameters starting from the reasons for it to

the various causes, problems faced due to prevalence of traits of thalassemia and errors related to it. The questionnaire<sup>11,12,13,14</sup> was made up by the project team and was cross checked by the guide. The Questionnaire was filled up by the students, faculty members as well as administrative staff of different branches in the college premises in the campus.

### 3. MS Excel :-

The opinion through the filled up questionnaire were calculated by the project team. The data so obtained was analyzed with the help of Microsoft excel and various results as well as conclusions were obtained. The graphical results were obtained through the Microsoft office excel. Different graphs were plotted from the data obtained to get a good pictorial representation.

## Questionnaire:

### THALASSEMIC PROFILE

- Blood Group:-
- Locality:-

Urban	
Rural	
Semi-Urban	

- Have You Donated Blood?

Yes  No

If yes, how often do you donate blood in a year:-

3 Months	
6 Months	
9 Months	
!2 Months	

- Are you aware of Thalessemia ?

Yes  No

If yes, then the source is:-

TV Advertisements	
Campaigns	
Blood donation	
Leaflets	
Others, Please Specify:-	

- Have you undergone test for Thalassemia?  
Yes  No   
If yes, the result is:-  
Major  Minor   
No trait
- Do you know how this disease spreads?  
Yes  No
- Do you know about the treatment?  
Yes  No   
If yes, Please specify:-
- Do you think Thalessemia test is necessary before marriage?  
Yes  No
- Have you heard about any campaign about Thalassemia?  
Yes  No   
If yes, Please Specify:-
- Do you know any person having Thalassemia?  
Yes  No
- Are you willing to help persons having Thalessemia major?  
Yes  No

### RESULTS:

Majority of the people didn't donate blood(58%), almost all of them were **aware**(82%) about thalassemia due to awareness programs in the campus. Most of them said that tv **advertisement**(27%) and **camps**(23%) were responsible for the awareness. The public had mixed response on the spread and treatment of thalassemia. The main motive of this survey was to check out the awareness about the thalassemia and the need to know it. The most pleasing result came out to be that **83% of considered the test must before marriage.**

### DISCUSSIONS:

A total of 500 questionnaire were distributed in the college premises with respondent rate of 450(90%).majority of respondents, 73% were aged between 18-23 years, while 269(59.5%) were female and 181(40.5%) were male. The survey was conducted in the colleges comprising of Ayurvedic,

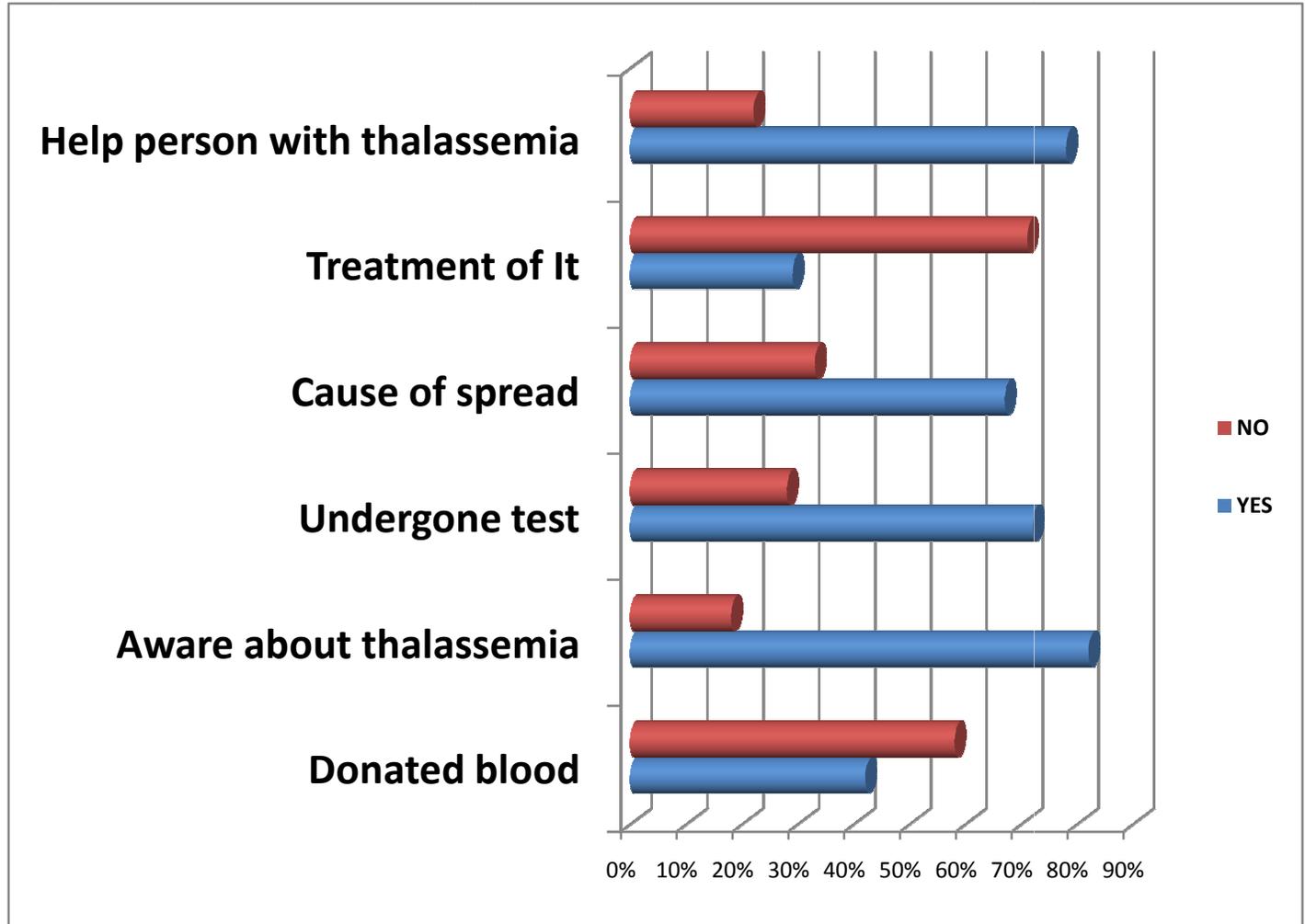
Biotechnology, Engineering and pharmacy. The survey comprised of 290 students (64.4%) including both undergraduate as well as postgraduate students. the rest were faculty members (26.6%) and administration incharge (8.8%).

The thalassemic knowledge of the respondents was found out to be very good. The only department where they lacked was that the majority of them didn't know the cause of the disease. Almost 82% of respondents had undergone test for thalassemia. The reason for such a high rate for testing of thalassemia was that the colleges in the campus had compulsory testing of thalassemia in the first year of college. This activity of the institutes has helped in spreading the knowledge about the thalassemia.

Majority of the people didn't donate blood(58%), almost all of them were aware(82%) about thalassemia due to awareness programs in the campus. Most of them said that tv advertisement(27%) and camps(23%) were responsible for the awareness. The public had mixed response on the spread and treatment of thalassemia. The main motive of this survey was to check out the awareness about the thalassemia and the need to know it. The most pleasing result came out to be that 83% of considered the test must before marriage. The knowledge of traits of thalassemia will help them to decide whether to have their child or to decide about choosing right life partner.

### CONCLUSION:

The results from this study are limited to self reported data, and as with all self reported data, it depends on information given by the respondents. The knowledge as well as awareness about thalassemia was found out to be very good. The only required improvement was to **increase the blood donation** and the **knowledge for treatment of Thalassemia.**

**Graphs:**

**Graph 1:** Overall opinion about the respondents on the thalassemic survey.

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