

# LEVEL OF AWARENESS ABOUT THALASSEMIA AMONG FUTURE HEALTH CARE PROVIDERS

By

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#### **CONTENTS:**

- Introduction
- Objectives
- Methodology
- Results
- Discussion
- Conclusion

Acknowledgement

#### **INTRODUCTION:**

- Beta-thalassemia is one of the most common hereditary hemolytic anemia in our country.
- Worldwide 15 million patients have clinically apparent thalassemic disorder.
- Every year about 100,000 babies are born with severe form of thalassemia worldwide.

- > About 3% of the world population (200 million people) are carriers of the  $\beta$ -thalassemia gene.
- ➤ The highest carrier frequency is reported in Cyprus (14%), Sardinia (10.3%), and Southeast Asia (1–9%).
- ➤ The carrier frequency in Pakistan is 5–8% making around 9.8 million carriers.
- Annual birth of thalassemia major babies in our country is 5000-6000.

- The knowledge about thalassemic disorder is very limited among the people in developing countries.
- The low literacy rate in Pakistan is one of the main obstacles in improving the level of awareness.
- Increase in basic knowledge in the community about thalassemia has a great impact in reducing the prevalence of disease.
- For this reason, the present study has been conducted to evaluate the awareness level about disease among student of MBBS, Nursing and Allied health sciences.

# **Objective:**

To determine the level of awareness about thalassemia among future health care providers in Sheikh Zayed Medical College/Hospital, Rahim Yar Khan.

## **Methodology:**

- Study Population: The study was conducted in future health care providers in a tertiary care hospital of district R.Y.K having "Center for Thalassemia Care (CTC)".
- CTC is a 16 bedded center catering population of around 10 million of district Rahim Yar Khan & adjoining areas.

# Type of study:

Cross sectional descriptive study.

#### **Duration of Study:**

Study was carried out over a period of four months from September 2017 to December 2017.

## Sample size:

- Four hundred subjects including 134 males and 266 females.
- Sampling technique: Purposive sampling.

#### **Method:**

- Structured information based questionnaire was designed which included all the information regarding name, gender, age of participants and questions about thalassemia.
- The students of MBBS (year3 & 4), Nursing (year3 & 4) and Allied health students (year3&4) were included as study subjects.
- Thirteen questions were asked to judge the level of awareness about thalassemia.

Awareness level was ascertained by dividing the answers into 3 categories i.e.

- Correct answers given less than 6 questions were considered as <u>poor knowledge</u>.
- Correct answers given from 6–10 were considered as <u>average knowledge.</u>
- 3. Correct answers above 10 to 13 were considered having good knowledge.

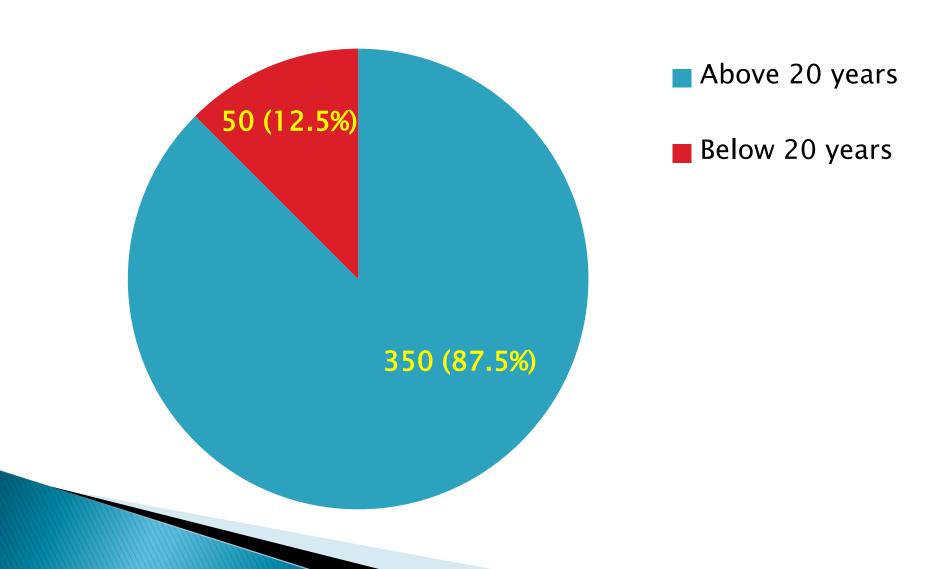
#### Questionnaire

- 1. Ever heard about thalassemia?
- 2. From where do you heard about thalassemia?
- 3. Do you have thalassemia minor gene?
- 4. Could child be thalassemic if both the parents have thalassemia minor gene?
- 5. Probability of having thalassemic child if both parents have thalassemia minor gene?
- 6. Could child be thalassemic if only one parent is thalassemic?
- 7. Can thalassemia spread by food?
- 8. Is transfusion the only way of survival?
- 9. Detection of thalassemia during pregnancy is possible?
- 10. Is there any precaution to avoid a thalassemia major child?
- 11. Should a screening test necessary for each male and female before marriage for thalassemia minor detection?
- 12. Is there any permanent solution for thalassemia?
- 13. If yes then what will be the permanent solution?

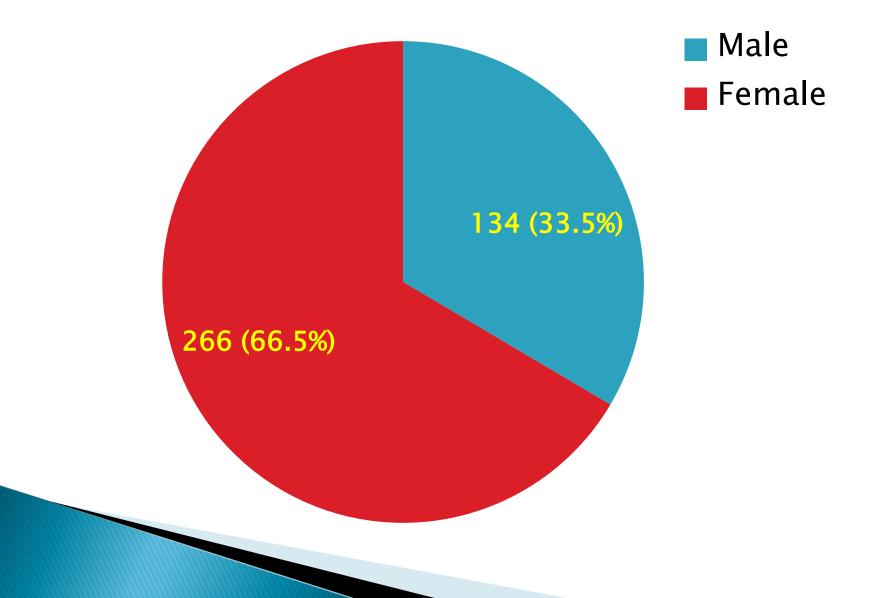
# Results:



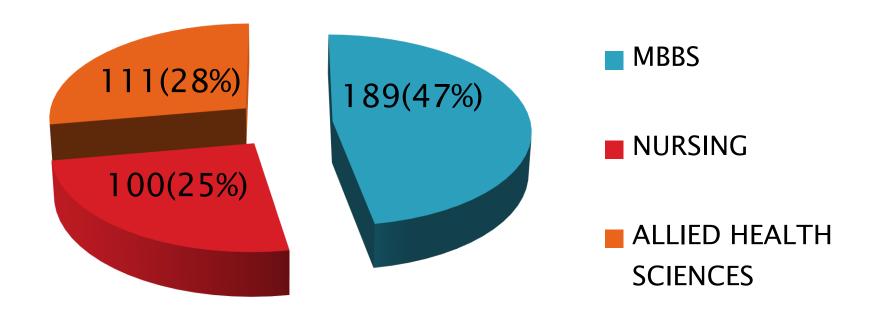
## **AGE Group Of Subjects:**



## Gender of subjects:



#### **Categories Of Subjects:**



# Awareness level among the M.B.B.S, Nursing and Allied Health Sciences students

Serial No.	Category	No. of students	Good knowledge	Average knowledge	Poor knowledge
1	M.B.B.S	189	141(74.6%)	40(21.16%)	8(4.23%)
2	Allied health sciences students	111	66(59.45%)	43(38.73%)	2(1.80%)
3	Nursing students	100	87(87%)	9(9%)	4(4%)
Grand total		400	294 (73.5%)	92(23%)	14(3.5%)

# Overall Awareness level among future health care providers

Awareness level	Frequency	Percentage (%)
Poor	14	3.5%
Average	92	23.0%
Good	294	73.5%
Total	400	100.0%

#### **Discussion**

In current study, 73.5% had good knowledge, 23% had average knowledge and 3.5% had poor knowledge.

# Comparison of results of International studies.

Malaysia

UAE

Malaysia

**Indonesia** 

India

**ATM Emdadul Haque** 

Syed Arman Rabbani

Vasudeva Murthy C.

R

**Julius Broto Dewanto** 

Pujani et al

Name of Author	Region	Awareness level (Good Knowledge + Average Knowledge)	Study Subjects
Current study	Rahim Yar Khan (Pakistan)	(96.5%)	Medical students+ Nursing + Allied Health Sciences

(89%)

(81%)

(61%)

**(90%)** 

(75.2%)

**Medical students +** 

**Pharmacy + Nursing** 

**Medical students +** 

**Pharmacy + Nursing** 

**Medical students** 

**Medical students** 

**Medical students** 

# Comparison of results of national

studies.			
Name of Author	Region	Awareness level (Good Knowledge + Average Knowledge)	Study Subjects
Current study	Rahim Yar Khan	(96.5%)	Medical students- Nursing + Allied Health Sciences
Safila Naveed	Karachi	(22%)	Medical students

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Muhammad Yousaf	Peshawar	(3.1%)	Management students
Arsalan Mirza	Karachi	(54.5%)average knowledge	Non-Medical university students
Daniyal Ahmad	Islamabad	(93%)	Medical students+

Non medical **Students** 

#### **Conclusion:**

There is sufficient knowledge regarding thalassemia in future health care providers which is making us hopeful that they will play a progressive and constructive role in prevention of thalassemia and will help to make thalassemia free Pakistan.

#### **ACKNOWLEDGEMENT**

- The subjects who participated in this study.
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- Staff of Thalassemia Center for their help and contribution.

# THANK YOU VERY MUCH