

## The Assessment of Psychological Stress and Coping Strategies among Parents of Thalassaemic Major Children in Tertiary Care Hospital.

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### Abstract

**Objective:** - To assess the stress among parents of thalassaemic children and also to assess coping strategies among parents of thalassaemic children.

**Materials and Methods:** - It is a prospective observational cross section study conducted over the duration of one year in parents of thalassaemic patients G.G.G Hospital for regular blood transfusion for their children after ethical clearance and informed consent a total of 50 parents were enrolled according to inclusion criteria. Parents were assessed using general health questionnaires' and cope strategies by using COPE INVENTORY. Results were analysed with help of standard deviation z test and chi square test.

**Results:** - Out of total 50 parents of thalassaemic patient's majority parents (48%) were in age group of 31 to 40 years and most of them were mothers (60%). Stress was observed in 28% of parents on GHQ 28 score which was more in mothers (33.33%), stress observed equal in both urban and rural area in all class of parents. As observed majority (78%) were from Nuclear families. 30.23% parents were stressed with longer duration of diseases (more than 3years of illness) compared to 14.29% where stressed with duration of less 3 years of illness, but data was statically insignificant as P value was greater than 0.05.

**Conclusion:** - In this study mothers of patients were more stressed. Acceptance (92.5%) was most used in coping strategies followed by religion (86.5%) and active coping strategies (80.75%). Substance use (25.5%) was least used coping strategies followed by Denial (37%), behaviour disengagement (39%) and self-blame (48%)

**Keywords:** - Thalassaemia, General health questionnaires' (GHQ28), COPE inventory, Psychological stress.

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### I. Introduction:

Thalassaemia is the most prevalent genetic disorder of HEMOGLOBIN throughout the world, the hereditary nature of this diseases, changes in appearance, accepting early death and need for the continuous treatment, impose on favourable psychological impacts on patients and their family. Due to chronic diseases in our study we have noticed experience of frustration, depression, helplessness, anxiety, anger, and burden of family in parents of thalassaemic patients.

**Objective:** - To assess the psychological stress and coping strategies among parents of Thalassaemic patient.

### II. Materials & Methods:

This prospective observational cross section study was done in 50 parents of Thalassaemic patient's in 12 months of periods. This study was done in Thalassaemia ward of Tertiary care centre at G.G.G Hospital Jamnagar., Gujarat, India We have included parents of Thalassaemic major patient's only. We have excluded

parents who having any pre-existing physical and mental illness. Psychological distress was assessed using GHQ28 and Coping strategies assessed using COPE INVENTORY.

1, General Health Questionnaire (GHQ28)13.: It was used to measure Psychological stress in each question has 4 possible responses.

i.e. Better than usual, Worse than usual or much worse than usual. Cut off point for high scoring was set at a positive response more than 4 and was labelled as distress.

2, Brief COPE(16): - It is a brief form of COPE inventory consisting of 28 items, categorised into 14 subscales (Self distraction, Active Coping, Denial, Substance abuse, Use of emotional support, Of Instrumental support, Behavioural disengagement, Venting, Positive reframing, Planning, Humour acceptance, Religion and self-blame). Items are arranged in 4 points Likert formats

(1= Never, 2=Very less, 3=Sometimes, 4= A lot). The items are summed for each subsection Separately to get a total score on all 14 categories. Binary score was used. The high score on Each subscale indicates more used of that particular coping strategy and loss score indicate less Use Of that coping strategies.

### III. Observation and Result:

The present study was conducted at GGG Hospital a tertiary level referral health care centre. Total 50 parents were included and analysed.

#### 1. Age Distribution

Age (Years)	No. Of parents	%
21-30	11	22
31-40	24	48
41-50	10	20
>50	5	10

As can be observed in my study majority (48%) of parents, were in age group of 31-40 years due to common child bearing age group.

#### 2. Sex Distribution

Sex	No of Parents	%
Males	20	40
Females	30	60

In my study 60% of the sample comprised of females and 40% were males. This was observed because the regular visiting hours of the parents to the hospital coincided with the working hours, so most of the fathers were off to their work.

Study conducted by Shazia Ali[78], Department of Physiology Islamic International Medical College Rawalpindi, Pakistan included a total of 40 parents included in which 42% fathers and 58% mothers which is comparable to our study.

#### 3. Distribution according to area of residence

Area of residence	No. of Parents	%
Rural	21	42
Urban	29	58

As observed in my study 58% of parents were from Urban area and 42% from Rural area. This equality in distribution reflects equal awareness regarding care of Thalassaemic patient in both the section.

#### 4. Duration of illness

Duration of illness	No. of Subjects	%
< 3 years	7	14
>3years	43	86

We categorized parents in two Groups according to the duration of the diseases from which patient was been diagnosed as Thalassaemia major.

Group A: - Duration of Diseases less than 3 years.

Group B: - Duration of Diseases more than 3 years.

As observed from above table only 14% parents were in Group A, Majority of parents were in Group B (86%).

#### 5. Assessment of stress in parents according to General health questionnaire (GHQ28).

Psychological status of parents	No. of parents	%
Stressed	14	28
Non-Stressed	36	72

In the present study psychological distress among of Beta Thalassaemic patients showed that all the parents of these patients experienced some kind of stress however, psychological distress was observed in 28%

parents while 72% parents were observed as non-distressed Beta thalassemia is an unending illness that can lead to excessive psychological burden to the patient and their families.

6. Stress in parents according to sex distribution.

	Father	Mother
Stressed	4	10
Non-Stressed	16	20

As seen above stressed was observed in 10% of father as compared to 33.33% mothers who were stressed. This denotes mothers were undergoing more psychological stress as compared to fathers.

7. Stress distribution according to area of residence.

	RURAL	URBAN
Stressed	4	10
Non-Stressed	17	19

As seen in above study 34.5% parents living in urban area where psychologically stressed as compared to parents coming from rural area which shows 19% where having psychological stress.

8. Stress in parents according to duration of illness.

Duration of illness	Stressed	Non-Stressed
<3years	1(14.29%)	6(85.71%)
>3years	13 (30.23%)	30 (69.77%)

As seen in above study we observed that stress was more in parents having duration of illness longer than 3 years. 30.23% Parents were having stressed with longer duration of diseases as compared to 14.29% Parents were stressed with duration of diseases less than 3 years.

9. Mean, Standard deviation and t- value of parents ( father & mother) of thalassaemic patients on the subscale of brief Coping ( N=50 )

Subscales	Father(N=20)	Mother(N=30)	T	P
Self-distraction	M=5, SD=2.2	M=4.60, SD=1.94	0.677	0.502
Active Coping	M=6.9, SD=1.447	M=6.17, SD=1.84	1.498	0.141
Denial	M=2.85, SD=1.26	M=2.93, SD=1.230	0.232	0.818
Substance used	M=2.05, SD=0.224	M=2.13, SD=0.571	0.620	0.538
Use of emotional support	M=5.5, SD=2.323	M=5.77, SD=2.239	0.940	0.352
Use of instrumental support	M=5.75, SD=2.049	M=5.43, SD=2.046	0.536	0.594
Behavioural disengagement	M=3.10, SD=1.683	M=3.07, SD=1.507	0.073	0.0942
Venting	M=4.35, SD=1.755	M=4.47, SD=1.697	0.235	0.815
Positive reframing	M=5.30, SD=2.430	M=4.93, SD=1.799	0.613	0.543
Planning	M=6.45, SD=2.089	M=6.07, SD=1.680	0.717	0.477
Humour	M=5.45, SD=1.731	M=5.70, SD=1.896	0.472	0.639
Acceptance	M=6.85, SD=1.663	M=7.77, SD=0.774	2.631	0.011
Religion	M=7.00, SD=1.747	M=6.87, SD=1.383	0.300	0.765
Self-blame	M=4.20, SD=2.353	M=3.60, SD=1.404	1.130	0.264

10. Use of Different Coping strategies in Parents

Sr. No	Coping Strategies	Our Study	Comparison with Shazia Ali Study [78]
1	Self Distraction	59.2%	82.5%
2	Active Coping	80.75%	97.5%
3	Denial	37%	60%
4	Substance used	25.5%	7.5%
5	Use of Emotional support	69%	73%
6	Use of Instrumental support	69.5%	90%
7	Behavioural Disengagement	39%	62.5%
8	Venting	55.25%	70%
9	Positive Reframing	63.5%	87.5%
10	Planning	77.75%	95%
11	Humour	70%	15%
12	Acceptance	92.5%	92.5%
13	Religion	86.5%	92.5%
14	Self-Blame	48%	92.5%

Most frequently used Coping strategies were acceptance (92.5%), religion (86.5%), Active coping (80.75%), Planning (77.75%), Humour (70%), Use of instrumental support (69.5%) and use of emotional support (69%), others include positive reframing (63.5%), Self-distraction (59.2%), Venting (55.25%), Self-blame (48%), Behavioural disengagement (39%), Denial (37%) and substance used (25.5%).

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