

## Factors affecting posttraumatic growth among parents of pre-term with severe jaundice

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### Abstract

Pre-term babies are at higher risk for developmental delays in later year of their life and also suffer from serious complications like severe jaundice. Caring a pre-term is sensitive aspect of parenting because chronic medical conditions become stressful for primary caregivers. However, different personality traits and coping strategies promote positive growth during critical stressful situations. In this study parents of preterm neonates with severe jaundice were studied to find out the factors affecting post-traumatic growth. The total sample of three hundred parents were collected with standardized psychological tools. The outcomes of research shows that variables such as different coping skills, personality traits and parental stress are act as predictors of post-traumatic growth. Further, based on outcomes, suggestions were incorporated to prevent parental stress at initial stage and recommendations were given to promote mental health care at antenatal and postnatal levels.

**Keywords:** severe jaundice, developmental delays, Posttraumatic Growth (PTG), Neonates.

### Introduction

Pre-term babies are always at higher risk of cognitive and motor developmental complications (Pulver et al, 2010). Birth of preterm newborns is at risk for complications including hyperbilirubinemia or severe jaundice and also for admission to Neonatal Intensive care units (Chawla et al, 2012).

According to World health Organization (2019), approximately 1.2 million neonates die in India each year due to different ailments. Globally 36 per cent neonates die because of infections whereas in India this is estimated to be 52 per cent. The information of neonatal jaundice is not

available in developing Asian countries as majority of births occur at home.

The children having developmental delays may disrupt the functioning of families and It also require additional care that generate stress among relationships within the family (Gray, 2003; Vinayak & Dhanoa, 2017).

Neonate with severe jaundice causes financial burden on parents in terms of for prolonged treatment. Caring a sick newborn is time consuming as well as it requires additional efforts.

Parents with preterm infant having neonatal jaundice are on higher emotional distress as compared to parents of term babies within one month of delivery (Stirin et al, 2013). The hospitalization of a newborn may increase parental stress and extra care of a sick neonate may result in burnout among parents (Lopez et al, 2010).

There is a wide literature of about the negative aspect of illness and its impact on their families, However, there are dearth of studies which have emphasized on the positive perspective towards the consequences of sick child on the functioning of parents. This study focuses on the importance of Posttraumatic growth that resulted due to major life trauma and being a parent of sick neonate is also traumatic situation for any parent (Rhee et al, 2013).

The number of studies have been reviewed, however very less work has been published on the parents of newborn pre-term babies affected with severe jaundice. Therefore, this study was designed to assess the factors that are affecting posttraumatic growth among the parents of pre-term babies with severe jaundice.

#### Objectives

To examine personality traits and coping styles as factors affecting post-traumatic growth among the parents of pre-term with severe jaundice.

#### Scoring and Statistical Analyses

Table shows the Regression Equations for posttraumatic growth among different groups of selected sample

Groups	Predictor Variables	Std.Co-efficient $\beta$	t	R <sup>2</sup>	R <sup>2</sup> Change	F Change
MN	O	0.46	5.31**	0.28	0.05	10.99**
	E	-0.4	4.38**	0.35	0.07	15.88**
FN	SB	-0.27	3.48**	0.58	0.13	47.10**
	CON	-0.14	2.75**	0.61	0.02	8.73**
	SI	0.11	2.15*	0.63	0.01	4.64**
MFN	O	0.22	2.71**	0.48	0.05	7.53**
	EM	-0.17	2.13**	0.56	0.02	4.53**
FFN	SI	0.22	6.09**	0.32	0.08	40.21**
	O	0.03	0.40*	0.49	0.07	10.15**
	PBS	0.25	3.61**	0.53	0.04	6.26**
	A	0.37	4.86**	0.58	0.05	8.66**

#### Hypotheses

It is expected that personality traits and coping styles would act as factors that are affecting posttraumatic growth of parents of pre-term with severe jaundice.

#### Methodology

The main objective of this study was to analyze the factors that are responsible for post-traumatic growth among parents of pre-term babies with severe jaundice. For this study, total three hundred sample was selected. The sample is bifurcated into fathers and mothers and there was further categorization of the sample based on male and female pre-term babies. The mothers and fathers between the age range of 20-25 years were selected. Preterm with more than 17mg/dl bilirubin level were included. The sample was collected from the hospitals of Chandigarh.

#### Ethical Considerations

The ethical standards were maintained throughout the research. The written consent was taken from the participants

#### Tools

1. Ways of Coping Inventory (WCI)(Folkman & Lazarus, 1985)
2. NEO-Personality Inventory (Big-5)(Costa & McCrae, 1985)
3. Posttraumatic Growth Inventory (PTGI) (Tedeschi & Calhoun, 1996)

MMN	PBS	0.22	2.25*	0.26	0.05	5.16**
FMN	SS	0.47	4.58**	0.18	0.18	16.30**
	SI	0.22	2.31**	0.15	0.09	12.01**
	A	-0.25	2.48**	0.24	0.06	6.18**
<p><b>*p≤0.05,**p≤0.01</b> ;</p> <p>PTG= Posttraumatic Growth, O=Openness, E= Extraversion, A= Agreeableness, C=Conscientiousness, N= Neuroticism, SI= Social Isolation, SB= Self Blame, D= Distancing, IND= Independent, IC= Intellectual-Cultural, PBS= Problem solving, EM= Empathy, SS=Social Support.</p> <p>MN= Mothers of pre-term, FN= Fathers of pre-term, MFN= Mothers of Female pre-term, FFN= Fathers of Female pre-term , MMN= Mothers of male pre-term, FMN= Fathers of Male pre-term</p>						

### Results:

The regression analysis was applied to assess the factors that are affecting posttraumatic growth. Under personality traits, Openness and extraversion variables acted as a relevant factor for posttraumatic growth. Among fathers of male and female preterm with severe jaundice, self-blame and social isolation variables turned out to be relevant factor.

Among mothers of male preterm openness and empathy predicted as relevant factor for posttraumatic growth. While, among fathers of male preterm agreeableness, openness variables tuned out to be relevant predictors.

Among mothers of female preterm problem solving were retained as predictors while among fathers of female pre-term social support, agreeableness were retained as predictors for posttraumatic growth.

### Discussion:

The objective of the study was to study the factors affecting posttraumatic growth in parents of pre-term babies having neonatal severe jaundice. Sample was selected on the basis of inclusion criteria and standardised tools were applied to collect the data from the selected participants. The statistical analysis was done with the help of SPSS software. The outcomes of this study shows that openness was turned out to be predictor of posttraumatic growth in mothers of male and female preterm with severe jaundice, fathers of female preterm with severe jaundice. The hypothesis (H1b) was supported with detailed reasons that openness has more

modest relationships with PTG than other personality traits (Steel et al, 2008). Openness to experience is significantly related to the total posttraumatic growth and the effects were moderated by the severity of stress.

The other personality trait is extraversion and it enjoys interacting with people, tend to be enthusiastic, action-oriented individuals. In the present study, posttraumatic growth is significantly predicted by extraversion in mothers of male and female preterm with severe jaundice. The distinct reason in support of results is that extraversions are expected to better engage with social support following traumatic exposure. The mothers of male and female pre-term babies with severe jaundice easily engage with the mothers of other neonates admitted in NICU and they have shared information which may help them to attain positive growth. However, fathers of male and female neonates were less social and did not get opportunity to share the feelings with others.

Further, the number of coping style that were used immediately during or after the trauma is interconnected with cognitive processes that is adapted and determine the level of growth (Wild & Paivio, 2004). The findings of the present study reveal that self-blame as predictor of PTG among fathers of male and female preterm with severe jaundice. The constructive reason in support of result is that in Indian culture, head of the family is liable for financial support. The only earner in family often comes under stress

and use various defense mechanism to deal with traumatic situations. During the hospitalization of newborns, the fathers as compared to mothers sometimes blame themselves for the illness of their newborns. Few studies supported that self-blaming predict positive growth among fathers as compare to mothers (Stirin et al, 2013).

In our sample, social isolation is also emerged as a significant predictor for posttraumatic growth among the fathers. The comprehensive reason for this could be the situations and traumatic experiences influenced the individual to use different coping skills. Another reason could be sometimes coping used by parents act as defense mechanisms and social isolation is used by fathers as a sublimation to divert negative into positive and acceptable way. Problem solving as coping mechanism also emerged as predictor of posttraumatic growth among fathers of female pre-term and mothers of male pre-term babies.

#### **Implications and Suggestions:**

Better understanding and insight can surely help us to ascertain interventions and coping strategies to reduce the effect of traumatic events and to grow in positive direction. In India, there is a need for psycho-education to sensitize the parents regarding the care of sick pre-term neonates. This research is the unique of its kind in India, to use a large sample to quantitatively document the experiences of the both parents of pre-term babies with severe jaundice and attempted to find predictors of posttraumatic growth.

#### **Conclusion**

The findings highlighted the experience of parents of pre-term babies with severe jaundice that promote posttraumatic growth if supported with coping skills. There is a crucial need to develop different coping strategies which respond positively to individual's changing needs, especially for the parents of neonates admitted in NICU for the treatment of hyperbilirubinemia. In conclusion, this study facilitates the understanding of psychological factors that can influence the physical as well as mental health of parents of severely sick babies which could lead to stress but at the same time certain factors may contribute to develop posttraumatic growth that enhance the quality of life despite having stressful situations in life.

#### **Conflict of Interest:**

There is no conflict of interest.

#### **Funding:**

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