



**A STUDY ON LEVEL OF DEPRESSION, ANXIETY AND STRESS AMONG PARENTS
OF DOWN SYNDROME CHILDREN VERSUS PARENTS OF HEALTHY CHILDREN**

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ABSTRACT

The drive of this research was to assess the level of depression, anxiety and stress among parents of healthy children versus parents of down syndrome children (Intellectually Disabled Children). The sample was comprised of 200 Parents (100 Parents of healthy children and 100 Parents of down syndrome children). It was exposed in this study that the level of depression in parents of down syndrome children was significantly greater ($M = 11.60$, $SD = 4.80$) than the level of depression in parents of healthy children ($M = 7.25$, $SD = 3.72$), $t(198) = 6.36$, $p < .05$. The level of anxiety in parents of down syndrome children was significantly higher ($M = 11.64$, $SD = 4.03$) than the level of anxiety in parents of healthy children ($M = 7.29$, $SD = 3.35$), $t(198) = 5.86$, $p < .05$. The level of stress in parents of down syndrome children was significantly higher ($M = 19.42$, $SD = 6.13$) than the level of stress in parents of healthy children ($M = 12.35$, $SD = 3.96$), $t(198) = 8.92$, $p < .05$. It was witnessed that there was high proportion of depression, anxiety and stress in parents of down syndrome children relatively to parents of healthy children.

Keywords: Depression, anxiety, stress, down syndrome children, Intellectual Disability

1. INTRODUCTION

Down syndrome is an array of physical and mental traits affected by a gene problem that occurs afore birth. Children who have Down syndrome incline to have certain features, i.e. a flat face and a short neck. They also, having some level of intellectual disability. These intellectual disability varies from individual to individual, however in maximum cases it occurs from mild to moderate. Down syndrome is a permanent disorder, but however with caution and support, children who have Down syndrome can grow up to have healthful, cheerful, productive lives [1]. Down syndrome is produced by a problem with a child's chromosomes. Generally, a person has 46 chromosomes, mostly individual with Down syndrome take 47 chromosomes. In atypical cases, other chromosome problems, generate Down syndrome. With extra or abnormal chromosome some variations in the brain and body grow up. Medical Science doesn't know the particular cause, but however some things increase the chance that you'll have a child with Down syndrome. These effects are called risk factors. Many offspring with Down

syndrome are also born with breathing problems and heart, ear, intestine problems. These health circumstances frequently lead to other problems, such as respiratory diseases or hearing loss, although maximum of these problems can be treated [2].

Intellectual Disability factually known as mental retardation are common in down syndrome children which is considered by major restrictions in intellectual working also named intelligence, and in adaptive behavior containing social, conceptual and practical assistances. This disability initiates in early age [3]. Intellectual Disability can be categorized into four classes dependent on Intelligence Quotient (IQ) e.g. Mild (IQ 50 - 70), Moderate (IQ 35 - < 50), Severe (IQ 20 - < 35) and Profound (IQ < 20). Previous researchers have exposed a relationship between caretaking of children with developmental cognitive delays and parental sufferings [4, 5].

The abilities attained through parental involvement may be imperfect reliant on the severity of cognitive delay. Therefore, numerous demands persevere during

childhood and in adult life, leading to continuing to parental stress. Moreover, stress of the parents may be increased by the behavior matters of these children [6, 7]. Parents informed more psychological symptoms when a child presented a higher level of dysfunction [8]. The level of mild Intellectual Disabilities is higher in Pakistan i.e. 65/1000 [9]. Reports executed in developing world have revealed reasonably constantly high rates anxiety and depressive disorders; where 10-44% of people undergoes from anxiety and depression. Higher level of both depression and anxiety disorders among women have been narrated in Pakistan [10]. Occurrence rates of 34% for depression and anxiety in Pakistan [11]. 72% of women and 44% of men described anxiety and depression are reported in Pakistan [12].

Although, a small data in developing countries like as Pakistan is available, regarding the effect of hovering children with Intellectual Disability, based upon the ability of parent working with the danger of psychopathology. Parental coping behavior and company of social support in association with developmental disabilities can influence

the level of parental distress [2]. This risk may be measured by four comprehensive domains: psychological health, physical health, social relationships, and environment, whereas escalating that parents function both individually and collectively throughout the day and through the lifetime of a child with Intellectual Disability. There was established to be high level of anxiety in parents of children with Intellectual Disability [13]. Families of Intellectually Disabled children need greater help than those who have children with severe chronic illness/physical handicap [14]. Development of children may need to focus parental stress, which in go will help optimize treatment result for the child and the family [15]. In a previous study concerning children with autism and their parents, a brief COPE tool was used. Use of cognitive reframing constructed improved parental well-being in respects to depression and anger [16]. More researches are required to assess the impact of raising children with Intellectual Disability, connected behavioral concerns on working of parents, and the dangers for psychopathology.

Depression is thought, the disorder of the normal brain Neurochemistry and the symptoms are pondered as negative thoughts, moods, and behaviors. Uneven eating, sleeping, crying spells, and reduced libido are the advance symptoms of depression [17]. Anxiety is dissimilar to fear, which is felt about something actually frightening or threatening and is an appropriate response to a realized threat. Anxiety is the sense of fear, apprehension, and discomfort, commonly generalized and ambiguous as an overreaction to situations that is only personally realized as upsetting. To compare the level of depression, anxiety and stress among parents of healthy children versus parents of down syndrome children (Intellectual Disable Children) was the main objective of the study. What is the level of depression, anxiety and stress among parents of down syndrome children (Intellectual Disable Children) comparatively to parents of healthy children?

2. METHODOLOGY

For the present study 200 parents of healthy and down syndrome children (Intellectual Disable Children) were taken from district

Faisalabad and district Lahore. The written informed consent was obtained from the patients. The inclusion criteria of the sample were the parents with the age of 25 years to 60 years. The exclusion criteria of the sample were parents with the age below 25 years and above 60 years and who were illiterate. The present study was based on comparative research design.

2.1 Instrument

The data on depression, anxiety and stress were collected by instruments of Depression, Anxiety and Stress Scale (DASS) by Lovibond & Lovibond in 1995. Individual scores on Depression Scale were labeled into five groups (0 – 9) Normal, (10 – 13) Mild, (14 – 20) Moderate, (21 – 27) Severe and (28+) Extremely Severe. Individual scores on Anxiety Scale were categorized into five groups (0 – 7) Normal, (8 – 9) Mild, (10 – 14) Moderate, (15 – 19) Severe and (20+) Extremely Severe. Individual scores on the Stress Scale were categorized into five groups (0 – 14) Normal, (15 – 18) Mild, (19 – 25) Moderate, (26 – 33) Severe and (34+) Extremely Severe [18].

Cronbach's alpha for the depression scale is

0.91, anxiety scale is .84 and stress scales is .90 [19, 20]. Depression, Anxiety and Stress Scale (DASS) and Hospital Anxiety and Depression Scale (HADS) are strongly associated for both anxiety ($r = 0.87$) and depression ($r = 0.68$) [21].

RESULTS AND DISCUSSION

The analysis was carried out about the difference in the level of depression, anxiety and stress among parents of healthy children and parents of Down 's syndrome children table 1.

Table 1: t test on Depression, Anxiety and Stress among Parents of Down 's syndrome and Healthy Children on DASS Scale

Variables	Parents of Down Syndrome Children		Parents of Healthy Children		t Value
	Mean	SD	Mean	SD	
Depression	11.60	4.80	7.25	3.72	6.36
Anxiety	11.64	4.03	7.29	3.35	5.86
Stress	19.42	6.13	12.35	3.96	8.92
df = 198, p < 0.001, N = 100 for each group					

As revealed in the table 1, it was exposed that the level of depression in parents of down syndrome children (Intellectually Disabled Children) was significantly greater ($M = 11.60$, $SD = 4.80$) than the level of depression in parents of healthy children ($M = 7.25$, $SD = 3.72$), $t(198) = 6.36$, $p < 0.001$. The exposed the level of anxiety in in parents of down syndrome children was significantly higher ($M = 11.64$, $SD = 4.03$) than the level of anxiety in parents of healthy children ($M = 7.29$, $SD = 3.35$), $t(198) = 5.86$, $p < 0.001$. The exposed the level of stress in parents of down syndrome children was significantly higher ($M = 19.42$, $SD = 6.13$) than the level of stress in parents of healthy children ($M =$

12.35 , $SD = 3.96$), $t(198) = 8.92$, $p < 0.05$.

To compare the level of depression, anxiety and stress among parents of healthy children and parents of down syndrome children. It was witnessed in this study that there was high rate of depression, anxiety and stress in parents of down syndrome children relatively to parents of healthy children. In a previous research it was described that high degrees of depression in the mothers of children with mental retardation (44.7%) and in mothers of children with autism (72.5%) [22].

A high intensity of stress or mental health issues veteran by parents of children with Intellectual Disability could be

associated to particular variables such as feeling social segregation and life dissatisfaction [23]. The findings of anxiety and depression among mothers were related with severity of Intellectual Disability in their children which has been revealed in Kumar & Akhtar study [24].

CONCLUSIONS

The high prevalence of depression, anxiety and stress in parents of down syndrome children (Intellectually Disabled Children) were observed relatively to parents of healthy children.

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