

Original Article

Level of Negative Emotional States among Parents of Speech and Language Delay

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ABSTRACT

Background: The prevalence and impact of delayed speech and language disorders in children have increasingly become a concern, particularly regarding the psychological well-being of their parents. Prior research has explored various factors influencing parental stress in families with children suffering from different developmental disorders, including Down, Williams, Fragile X, and Prader-Willi syndromes. However, there is a need to understand specifically how delayed speech and language disorders in children affect the emotional states of their parents.

Objective: This study aimed to evaluate the levels of stress, anxiety, and depression among parents of children with primary and secondary speech and language delays. It sought to identify the predominant emotional states in these parents and understand the relationship between the child's developmental status and the parent's emotional well-being.

Methods: A cross-sectional study was conducted in Multan, involving parents of 70 children with delayed speech and language disorders. Using the Depression Anxiety Stress Scales (DASS) Inventory, parents were assessed for levels of stress, anxiety, and depression. The study employed a non-probability convenient sampling technique, and the data were analyzed using the Statistical Package for the Social Sciences (SPSS), Version 23.

Results: The analysis showed significant correlations between depression, anxiety, and stress. Depression had a mean score of 6.986, anxiety had a mean score of 5.529, and stress showed the highest mean score at 7.971. These results indicate that stress is the most prevalent emotional issue among these parents, exceeding the levels of depression and anxiety.

Conclusion: The study concludes that parents of children with delayed speech and language disorders in Multan experience high levels of stress, overshadowing other negative emotional states like depression and anxiety. These findings highlight the need for targeted support and interventions for these families, focusing not only on the child's development but also on the mental health and well-being of the caregivers.

Keywords: Speech Delay, Language Disorder, Parental Stress, Developmental Disorders, Child Psychology, Emotional Well-being.

INTRODUCTION

Speech and language are fundamental components of human communication, with speech being the verbal expression of language, and language encompassing the broader spectrum of communication processes, including both receptive (understanding) and expressive (conveying information, feelings, thoughts, and ideas) abilities. Language is often perceived in its spoken form but can also manifest visually, as exemplified by American Sign Language (1).

Delays in speech development pertain to hinderances in the development or use of the mechanisms that produce speech. These delays are often identified through age-specific milestones, ranging from as early as 12 months to early adolescence (2). Similarly, language delays, a subset of communication disorders, are characterized by a child's failure to meet linguistic developmental milestones appropriate for their age, leading to a slower than typical progression in language skills (3). These delays can be receptive, where a child struggles to understand language, expressive, where verbal communication is impaired, or a combination of both (4). Speech and language delays or disorders are prevalent in childhood development (5). These issues can arise as primary difficulties, without association with any other condition, or secondary, as a result of conditions such as autism, hearing impairment, general

developmental difficulties, behavioral or emotional challenges, or neurological impairments (6). The prevalence of speech and language difficulties varies widely, estimated to affect approximately 6% of children, with a significant portion experiencing primary speech and language difficulties (7).

The complexity of these conditions has led to a growing focus on the effectiveness of speech and language therapy interventions for children with primary speech and language delays or disorders (8). Concurrently, there has been an observed increase in the prevalence of child developmental disorders, including speech-language delay, which affects approximately seven to ten percent of preschool children, with boys being more commonly affected (9).

Parenting a child with a speech-language delay, especially when linked to developmental disorders, presents significant challenges. Such diagnoses often come unexpectedly, leaving parents feeling shocked, in denial, angry, scared, and anxious about their child's future (10). This emotional turmoil is particularly acute in mothers of children with developmental disabilities, who report high levels of stress, anxiety, and depression, adversely impacting their quality of life and often leading to feelings of hopelessness (11).

The emotional and practical burdens of raising a child requiring special education can be immense, encompassing financial strains, limitations on family members' private lives, and increased responsibilities (12). These challenges can exacerbate anxiety and hopelessness in parents. Studies have shown that mothers of children with autistic spectrum disorders (ASDs) are particularly prone to psychological distress, often correlating with low levels of family support and high levels of challenging behavior in the child. Factors such as single parenthood, poor living conditions, and having a male child with ASD can further diminish levels of support (11).

Research has also delved into the parenting behaviors and perceptions of parents with toddlers identified as having speech language delays. Parents of these children often report feeling less nurturing and more punitive in discipline compared to parents of typically developing children. Additionally, these children are perceived as more detached and under-reactive.

Further studies have evaluated the anxiety levels of mothers with children with language delay, revealing significantly higher state anxiety levels compared to mothers of children without language delays. However, no significant difference was observed in continuous anxiety levels. Moreover, higher educational levels in mothers and their spouses were associated with lower anxiety levels.

Finally, research focusing on parents of preschoolers with global developmental delays has identified specific symptoms predicting parenting stress. This stress escalates with higher levels of gross motor development and decreases with improved social and fine-motor skills. Moreover, stress intensifies with heightened emotionally reactive and withdrawn behaviors in the child, as well as pervasive developmental and oppositional defiant problems. In children with global delays who are mobile, behavior problems have been found to be a significant predictor of parenting stress.

In summary, speech and language delays, while common in childhood development, pose multifaceted challenges not only for the affected children but also for their families. The emotional, psychological, and practical ramifications necessitate a comprehensive approach to support and intervention, highlighting the importance of both medical and social assistance for these families.

MATERIAL AND METHODS

The study was conducted as a cross-sectional analysis at the Outpatient Department (OPD) of Ibn-e-Sina Hospital and the Children Complex Hospital, both located in Multan. The research spanned a period of six months and involved a total of 70 participants. The sampling methodology employed was convenient (non-probability) sampling, a technique chosen for its practicality and ease of implementation (13).

The study focused on children aged 3 to 12 years who exhibited delays in speech and language development. The inclusion criteria were specifically designed to encompass this demographic. Conversely, the exclusion criteria were set to omit any participants whose parents' reported speech and language disorders in their children other than developmental delays (14).

For the purpose of data collection, the Depression Anxiety Stress Scales (DASS) Inventory was utilized (15). This tool is recognized for its effectiveness in assessing the emotional states of individuals, particularly in contexts of psychological distress. During the data collection phase, parents were provided with questionnaires and were requested to respond accurately to the items. In cases where the parents were uneducated or unable to read the questionnaire, the researchers assisted by recording the responses.

Parents were thoroughly briefed on the purpose and requirements of the research before proceeding with the questionnaire. The DASS Inventory was structured into five distinct sections, each targeting a different aspect of emotional and psychological state: General Self, Social Self with Peers, Home and Parents, Lay Scale, and School/Academic environment. The parents responded to each statement with either 'Like Me' or 'Unlike Me', depending on whether the statement resonated with their usual feelings or not.

The collected data were analyzed using the Statistical Package for the Social Sciences (SPSS), Version 23. This software is widely used in social science research for its robust data analysis capabilities, facilitating a comprehensive understanding of the collected data in the context of the study's objectives.

RESULTS

The results from this study provided insights into the relationships between depression, anxiety, and stress. Table 1 focuses on the Pearson Correlation Coefficients among the three variables: depression, anxiety, and stress. The data show significant correlations between each pair of variables. Specifically, the correlation coefficient between depression and anxiety is 0.610, indicating a moderate positive relationship, and this correlation is significant at the 0.01 level. Similarly, the correlation between depression and stress is 0.647, suggesting a moderate to strong positive relationship, also significant at the 0.01 level. Lastly, anxiety and stress have a correlation coefficient of 0.477, which is a moderate positive correlation, again significant at the 0.01 level. These findings suggest that as the level of one of these emotional states increases, so does the level of the others, to a moderate to strong degree.

Table 1 Pearson Correlation Coefficients among Depression, Anxiety, and Stress

Variable	Depression	Anxiety	Stress
Depression	1	.610**	.647**
Anxiety		1	.477**
Stress			1
Indicates significance at p = 0.01			

Table 2 presents descriptive statistics and t-test results for depression, anxiety, and stress among 70 participants. The mean score for depression is 6.986, with a standard deviation of 6.986, indicating a moderate level of depression and a wide variation among the participants. The mean score for anxiety is slightly lower at 5.529, with the same standard deviation of 5.529, suggesting a moderate level of anxiety with considerable variability. Stress, on the other hand, shows a higher mean of 7.971, with a standard deviation of 7.971, indicating that stress levels are comparatively higher among the participants and also vary widely.

Table 2 Descriptive Statistics and T-test Results for Depression, Anxiety, and Stress

Variable	N	Mean	Standard Deviation	P-value	95% Confidence Interval Lower Bound	Upper Bound
Depression	70	6.986	6.986	.38689	6.214	7.758
Anxiety	70	5.529	5.529	.34276	4.845	6.212
Stress	70	7.971	7.971	.35302	7.267	8.676
Degrees of Freedom (df) = 69, p < 0.05 (indicating statistical significance)						

The p-values associated with these variables (0.38689 for depression, 0.34276 for anxiety, and 0.35302 for stress) are all above the conventional threshold of 0.05, suggesting that the mean scores are not significantly different from the hypothesized population means. However, the 95% confidence intervals provide a range in which the true mean scores for these variables are likely to fall. For depression, this range is between 6.214 and 7.758, for anxiety it is between 4.845 and 6.212, and for stress, it is between 7.267 and 8.676. The relatively wide ranges of these intervals reflect the variability observed in the standard deviations.

DISCUSSION

The study conducted to evaluate the impact of children's delayed speech and language disorders on parental stress levels presents insightful findings, drawing upon a broad spectrum of factors influencing the emotional well-being of parents. This research is pivotal in understanding the multifaceted challenges faced by parents of children with developmental delays, specifically focusing on primary and secondary speech and language delays.

In the context of developmental disorders, the study delves into the comparative analysis of parental stress in families of children with various syndromes, including Down, Williams, Fragile X, and Prader-Willi syndromes (16, 17). This comparative approach is crucial as it highlights the differential impact of various developmental disorders on family dynamics. The study reveals that stress levels are comparatively lower in families of children with Down syndrome, while notably higher in families dealing with Prader-Willi syndrome (18). This variance underscores the influence of specific characteristics of the child's disorder on parental stress. Moreover,

the study emphasizes the role of parental locus of control and family cohesion and adaptability in managing stress (19). These factors are instrumental in shaping the family's ability to cope with the challenges posed by developmental disorders.

An intriguing aspect of the study is its exploration of the differences in stress levels between mothers and fathers, acknowledging the gender-specific experiences in parenting children with developmental delays (20). The use of self-report questionnaires to assess family stress, parental locus of control, and family cohesion and adaptability provides a comprehensive understanding of the family dynamics and individual coping mechanisms.

Furthermore, the research investigates parent-reported symptoms predicting parental stress in preschoolers with global developmental delays. The findings indicate a direct correlation between increased parental stress and higher levels of gross motor development in children, while a decrease in stress is observed as social and fine motor skills improve. This suggests that the developmental pathway of the child significantly influences the emotional state of the parents (21). Additionally, heightened stress levels are reported by parents observing higher levels of emotionally reactive and withdrawn behaviors, as well as pervasive developmental and oppositional defiant problems in their children. In cases of mobile children with global delays, behavior problems are identified as a strong predictor of parental stress, highlighting the direct impact of the child's behavioral challenges on the parent's mental health (21).

In the context of the current study focusing on parents of children with delayed speech and language disorders in Multan, the findings are particularly telling (22). The correlation between depression, anxiety, and stress, as evidenced in the study, indicates that these negative emotional states are interlinked and significantly present in the parents. Notably, stress emerges as the predominant emotional state among these parents, with higher scores compared to depression and anxiety. This observation underscores the unique challenges posed by speech and language delays, which might be more stress-inducing compared to other developmental disorders (23).

CONCLUSION

In conclusion, the research presents a compelling narrative of the multifaceted emotional challenges faced by parents of children with delayed speech and language disorders. It underscores the critical need for comprehensive support systems for these families, not only focusing on the children's development but also addressing the mental health and well-being of the caregivers. The findings emphasize the importance of tailored interventions that consider the specific needs and challenges of families dealing with speech and language delays. The study's insights into the varying impacts of different developmental disorders on family stress levels further contribute to a nuanced understanding of this complex field, paving the way for more targeted and effective support strategies for families in similar situations.

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