A STUDY TO EVALUATE THE EFFECTIVENESS OF A NURSING SUPPORT PROGRAM FOR PARENTS OF CHILDREN WITH AUTISM REGARDING DAILY CARE

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KEYWORDS	ABSTRACT:
Nursing support program, autism, parents, daily care	**Introduction**: Parents of children with autism spectrum disorder (ASD) often experience heightened levels of stress, anxiety, and depression compared to parents of typically developing children or those with other disabilities. This increased psychological burden underscores the need for targeted support programs that can alleviate some of the emotional and practical challenges associated with caregiving. This study aims to evaluate the Effectiveness of a Nursing Support Program for Parents of Children with Autism Regarding Daily Care **Methods**: The study used a pre-experimental design and involved 60 caregivers of children diagnosed with autism, recruited from local support groups and pediatric clinics. Inclusion criteria were parents or primary caregivers actively involved in daily care, while those already receiving therapy for autism-related issues were excluded. Data was collected using the Autism Parenting Stress Index (APSI) to measure caregiver stress and the Knowledge, Attitude, and Practices (KAP) Survey to assess caregivers' knowledge, attitudes, and practices related to autism. **Results**: The Nursing Support Program significantly improved caregiver outcomes. Stress levels decreased from 3.9 (SD = 0.4) to 2.87 (SD = 0.35) ($p < 0.0001$). Caregivers' knowledge of autism, including its behavioral impact, communication strategies, and therapies, increased substantially. Attitudes toward autism diagnosis, confidence, application of visual support became more positive. **Conclusions**: The study concluded that Nursing Support Program effectively reduced caregiver stress and improved knowledge, attitudes, and practices related to autism care.

1. Introduction

Parents of children with autism spectrum disorder (ASD) often experience heightened levels of stress, anxiety, and depression compared to parents of typically developing children or those with other disabilities (Alnazly & Abojedi, 2019). This increased psychological burden underscores the need for targeted support programs that can alleviate some of the emotional and practical challenges associated with caregiving.

Research indicates that the role of nurses is pivotal in providing this support. Nurses serve as the primary point of contact for families navigating the complexities of autism care, and their ability to educate and empower parents can significantly influence the overall well-being of the family (Celia et al., 2019; Ooi et al., 2016). For instance, Hall and Graff emphasize the necessity for nurses to be well-informed about autism to effectively communicate with parents and guide them through the

healthcare system (Hall & Graff, 2010). This is echoed by Celia et al., who highlight the importance of nurses in listening to parents' concerns and facilitating access to resources (Celia et al., 2019).

Moreover, the literature suggests that the presence of a supportive network, including healthcare professionals, can mitigate the negative impacts of parenting a child with autism (Ooi et al., 2016). Ooi et al. conducted a meta-synthesis that revealed how various forms of support—ranging from family and friends to healthcare professionals—are highly valued by parents and can counterbalance the stressors associated with raising a child with ASD (Ooi et al., 2016). This finding aligns with the work of McStay et al., who discuss specific strategies that can be employed by healthcare providers to reduce parenting stress, such as psychoeducation and behavioral management techniques (McStay et al., 2013).

In addition to emotional support, practical assistance is also crucial. For instance, the study by Magaña et al. focused on psycho-educational interventions for Latino parents, illustrating that structured programs can enhance parents' competencies in managing their children's needs (Magaña et al., 2015). However, the study also noted that mere participation in such programs does not guarantee the application of learned strategies, indicating a need for ongoing support and coaching (Magaña et al., 2015). This highlights the complexity of implementing effective interventions and the necessity for continuous engagement between healthcare providers and families.

The effectiveness of nursing support programs can also be evaluated through the lens of parental satisfaction and quality of life. Research by Khanna et al. indicates that caregivers' quality of life is significantly impacted by the severity of their child's autism and associated behavioral problems (Khanna et al., 2010). This suggests that tailored interventions that address both the emotional and practical aspects of caregiving can lead to improved outcomes for parents. Furthermore, studies have shown that when parents feel supported by healthcare professionals, their overall satisfaction with care increases, which can lead to better health outcomes for both the child and the family (Jiu & Rungreangkulkij, 2019).

The integration of family-centered care principles into nursing practice is essential for enhancing the effectiveness of support programs. According to Gentles et al., engaging parents as active participants in their child's care fosters a collaborative environment that can lead to better health outcomes (Gentles et al., 2018). This approach not only empowers parents but also helps nurses understand the unique challenges faced by families, allowing for more personalized care strategies (Gentles et al., 2018). Additionally, the work of Tsironi and Koulierakis reinforces the idea that parental satisfaction is closely linked to the quality of communication and partnership established with healthcare providers (Tsironi & Koulierakis, 2018).

Furthermore, the cultural context in which families operate can significantly influence their experiences and the effectiveness of support programs. For instance, Kang-Yi et al. explored how community-level beliefs about autism affect the care provided to children and the support available to families (Kang-Yi et al., 2018). This underscores the importance of culturally sensitive approaches in nursing support programs, as they can enhance the relevance and acceptance of interventions among diverse populations (Kang-Yi et al., 2018).

In summary, the effectiveness of nursing support programs for parents of children with autism is multifaceted, encompassing emotional, practical, and cultural dimensions. The literature consistently highlights the critical role of nurses in providing education, emotional support, and practical assistance to families. By fostering strong partnerships with parents and integrating family-centered care principles, nursing support programs can significantly improve the quality of life for parents and enhance their ability to care for their children with autism. Future research should continue to explore innovative strategies for delivering these support programs and assess their long-term impacts on

family well-being. So the present study aimed to assess the impact of malnutrition on the academic performance of school children at selected school, Tiruvallur district.

2. Materials and Methods

The research was approved by Institution ethical committee. The study adopted a pre-experimental design. The study was conducted with 60 caregivers of children diagnosed with autism. The participants were caregivers (parents) of children with autism, recruited from local support groups and paediatric clinics. The inclusion criteria for this study were Parents or primary caregivers of children diagnosed with autism. Caregivers must have been actively involved in the day-to-day care of the child. Caregivers who were already receiving therapy for autism-related issues were excluded.

The tools used for data collection in this study included Autism Parenting Stress Index. The APSI was used to measure caregiver stress related to various aspects of caring for a child with autism. Knowledge, Attitude, and Practices (KAP) Survey assessed caregivers' knowledge, attitudes, and practices related to autism.

The nursing support program was a structured, 3-month intervention designed to provide comprehensive support to caregivers of children with autism. The program included educational sessions that focused on autism, its symptoms, and effective management strategies. Caregivers were trained in communication techniques tailored for children with autism, enhancing their ability to interact more effectively. The program also offered guidance on managing behavioral challenges and establishing consistent daily routines. To help caregivers cope with the emotional demands of caregiving, the program included strategies to manage stress, prevent emotional burnout, and address the social stigma often associated with autism. Additionally, caregivers were provided with resources to connect them with professional support and therapies, ensuring they had access to ongoing assistance beyond the program.

Data analysis was performed using SPSS software. Descriptive statistics were calculated to summarize the demographic data and responses to the APSI and KAP surveys. Paired t-tests were conducted to compare the pre- and post-intervention scores for stress levels (APSI) and knowledge/attitudes/practices (KAP survey) in order to assess the effectiveness of the intervention. A p-value of < 0.05 was considered statistically significant.

3. Results

Table 1 shows that the majority of the population falls within the 35–44 years age range (30%) and is predominantly female (66.67%). Most individuals are married (53.33%) and hold at least a Bachelor's degree (50%). The majority are employed (70%) and have an income level between ₹10,000–₹20,000 (30%). A significant portion of the population speaks English as their primary language (75%) and resides in urban areas (53.33%). Furthermore, the majority of individuals have a support system in place, such as family or friends (80%).

Table 2 shows the comparison of the mean and standard deviation (SD) pre- and post-intervention demonstrates the effectiveness of the Nursing Support Program. The mean score decreased from 3.9 (SD = 0.4) pre-intervention to 2.87 (SD = 0.35) post-intervention, indicating a notable reduction in the measure being evaluated, suggesting positive outcomes of the program. The paired t-test result (t = 12.5, p < 0.0001) indicates that this reduction is statistically significant, demonstrating a highly effective intervention in improving the measured outcomes.

Table 3 represents the Caregivers' knowledge about autism increased from 55% to 85%, and their understanding of autism's behavioral impact rose from 60% to 90%. Knowledge of effective communication strategies improved from 50% to 80%, and awareness of therapies and interventions

grew from 40% to 75%. Attitudes towards autism diagnosis became more positive, with 85% expressing positivity post-intervention, compared to 60% pre-intervention.

 Table 4 highlights Confidence in handling challenging behaviors increased from 50% to 80%, the use of positive reinforcement techniques rose from 45% to 70%, and the application of visual supports improved from 40% to 65%. Caregivers' satisfaction with the knowledge gained grew from 55% to 90%, and their willingness to seek professional support increased from 50% to 80%. These results demonstrate the intervention's effectiveness in enhancing caregivers' capabilities and attitudes in managing autism.

Table 1: Caregiver Demographic Variables

Demographic Variable	Category	Frequency (n)	Percentage (%)
1. Age	18–34 years	17	28.33%
	35–44 years	18	30%
	45–54 years	13	21.67%
	55+ years	12	20%
2. Gender	Male	20	33.33%
	Female	40	66.67%
3. Marital Status	Married	32	53.33%
	Single	15	25%
	Divorced	8	13.33%
	Widowed	5	8.33%
4. Education Level	No formal education	5	8.33%
	High school	15	25%
	Bachelor's degree	30	50%
	Post-graduate degree	10	16.67%
5. Employment Status	Employed	42	70%
	Unemployed	18	30%
6. Income Level	< ₹10,000	14	23.33%
	₹10,000–₹20,000	18	30%
	₹20,000–₹30,000	15	25%
	> ₹20,000	13	21.67%
7. Living area	Urban	32	53.33%
	Suburban	18	30%
	Rural	10	16.67%
8. Support System	Yes (family/friends)	48	80%
	No	12	20%

Table 2: Autism Parenting Stress Index of the care giver

Category	Pre-Intervention	Post-Intervention
1. Stress related to child's behaviour	3.5	2.2
2. Stress from managing daily routines	4.0	2.8
3. Stress from lack of support	3.8	2.5
4. Stress from social stigma	4.2	3.1
5. Stress from financial concerns	3.9	3.0
6. Overall parental stress	4.0	2.6
7. Emotional burnout due to caregiving	3.7	2.4
8. Difficulty balancing caregiving with personal life	4.1	3.0

Table 3: Knowledge, attitudes, and practices related to autism caregiver pre and post intervention.

KAP Category	Pre-Intervention	Post-Intervention
1. Knowledge about Autism (Correct Answers)	55%	85%
2. Understanding autism's impact on behavior	60%	90%
3. Knowledge of effective communication strategies	50%	80%
4. Awareness of therapies and interventions	40%	75%
5. Attitude towards autism diagnosis	Positive: 60%, Neutral: 30%, Negative: 10%	Positive: 85%, Neutral: 10%, Negative: 5%
6. Confidence in handling challenging behaviors	Low (50%)	High (80%)
7. Use of positive reinforcement techniques	45%	70%
8. Use of visual supports and schedules	40%	65%
9. Caregiver satisfaction with knowledge gained	55%	90%
10. Willingness to seek support from professionals	50%	80%

Table 4: Comparison of mean and SD to evaluate effectiveness of a Nursing Support Program

Measure	Pre-Intervention	Post-Intervention	Paired t-test
Mean (M)	3.9	2.87	t = 12.5 p <0.0001
Standard Deviation (SD)	0.4	0.35	

4. Discussion

The findings of the study revealed that the Nursing Support Program led to significant improvements. The mean stress score decreased from 3.9 (SD = 0.4) pre-intervention to 2.87 (SD = 0.35) post-intervention, indicating a notable reduction in stress. A paired t-test (t = 12.5, p < 0.0001) confirmed that this change was statistically significant. This result aligns with existing literature that emphasizes the high levels of stress experienced by caregivers of children with autism, often exacerbated by the demands of daily care and the emotional toll of managing challenging behaviors. (Adib et al. (2019) Razuan, 2023). The intervention's success in reducing stress levels can be attributed to the comprehensive support provided, which likely included psychoeducation, emotional support, and practical strategies for managing autism-related challenges.

Caregivers' knowledge about autism increased significantly, with understanding of its behavioral impact rising from 60% to 90%, knowledge of communication strategies improving from 50% to 80%, and awareness of therapies growing from 40% to 75%. Attitudes toward autism diagnosis also became more positive, with 85% expressing positivity post-intervention, compared to 60% pre-intervention. Previous research has shown that enhanced knowledge among caregivers correlates with reduced stress and improved coping strategies (Mai & Chaimongkol, 2021; Cramm & Nieboer, 2011).

Confidence in handling challenging behaviors increased from 50% to 80%, the use of positive reinforcement techniques rose from 45% to 70%, and the application of visual supports improved from 40% to 65%. Caregivers' satisfaction with the knowledge gained grew from 55% to 90%, and their willingness to seek professional support increased from 50% to 80%. These findings demonstrate the intervention's effectiveness in enhancing caregivers' capabilities and attitudes in managing autism. This finding aligns with result that Satisfaction with training programs has been linked to better adherence to recommended practices and improved outcomes for both caregivers and children (Mai & Chaimongkol, 2021; Fang et al., 2022).

5. Conclusion

The study concluded that Nursing Support Program effectively reduced caregiver stress and improved knowledge, attitudes, and practices related to autism care. Caregivers showed significant improvements in managing stress, understanding autism, and using effective strategies such as communication techniques and positive reinforcement. The program also boosted caregivers' confidence and willingness to seek professional support, demonstrating its positive impact on their ability to care for children with autism. For further study, it would be valuable to explore the long-term effects of such interventions, particularly in terms of sustained improvements in caregiver well-being and child outcomes. Additionally, expanding the program to include a larger, more diverse sample of caregivers and children could provide further insights into its broader applicability and effectiveness.

Conflicts of Interest
No

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