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A Study to Assess the Stress, Quality of Life and Coping Measures among Care Givers of Children Suffering with Congenital Anomalies in Selected Hospitals Bagalkot

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Abstract | **Original Research Article**

Background: Congenital anomalies are structural or functional defects present at birth and are a major cause of childhood morbidity and mortality. Children with such conditions often require prolonged treatment, repeated hospital visits, and continuous care. This situation places heavy physical, emotional, social, and financial stress on caregivers, often leading to poor quality of life. Coping measures such as social support, faith, and problem-solving strategies play a vital role in reducing caregiver burden. In regions like Bagalkot, limited resources and socioeconomic challenges further intensify the stress faced by caregivers. Hence, it is essential to assess their stress, quality of life, and coping strategies to plan supportive interventions.

Aim:

- To assess the stress among care givers of children suffering with congenital Anomalies.
- To assess the quality of life and coping measures among care givers of children suffering with congenital Anomalies.
- To find correlation between stress & quality of life among care givers of children suffering with congenital Anomalies.
- To find correlation between stress & coping measures among care givers of children suffering with congenital Anomalies.
- To find out the association between level of stress, quality of life and coping measure scores of care givers of children with congenital Anomalies and three selected socio demographic variables.

Methods and Material: The research design selected for this study was Non experimental descriptive research design. the sample size comprises of 84 care givers of children admitted in BVVS, HSK Hospital Research center Bagalkot & Shanti Hospital Bagalkot. The sampling technique adopted for this study was purposive sampling technique. In the present study the data was collected by self-structured questionnaires for sociodemographic variables, perceived stress scale (PSS-10) and quality of life scale WHOQOL-BREF scale (QOL-26) and BREIF COPE scale (COPE-28). was used to assess the perceived stress, quality of life and coping measures among care givers of children. The data analysis done by using descriptive and inferential statistics. ***Results:*** Findings of the study shown related to perceived stress shown that majority (100%) of care givers of children were having moderate level of perceived stress, mean ± SD score of perceived stress among care givers of children was 31.02 ± 2.27, median was 31 and range was about 7. Study results shown that mean ± SD and range of quality of life was 74.82 ± 6.74 and 38 respectively. Findings of the study shows that correlation between Perceived stress (PSS-10) and Quality of life (WHO-QOL) had shown weak negative correlation (r=-0.0690, P=0.532) and between perceived stress and coping measures had shown significantly moderately negative correlation (r=-0.504, P=0.00001). ***Conclusion:*** According to this study, majority of care givers of children who admitted in HSK hospital deal with moderate levels of stress, which has a negative effect on their quality of life, and negative effect on their coping measures Hence, it's important concern to adopt different stress management strategies and programs to reduce stress and improve the quality of life and coping measures among care givers of children suffering with congenital anomalies.

Keywords: Assess the Socio-demographic, Perceived stress, Quality of life, Coping measures, congenital anomalies.

INTRODUCTION

Childbirth is a major event, which brings a great responsibility for the parents. The parents and other family members need to change and adapt themselves to the needs of the developing child. Raising a child till he/she becomes independent is a demanding task for the parents and tests their courage, patience and ability Raising a child with disability is more difficult for the parents.[1]

Having a child with congenital anomaly is a very stressful event, as it affects the whole family due to the critical and permanent needs it might impose. Many challenges face the family of a child with a congenital anomaly that involve the long-term care that must be provided for the child, much hard work is required from family members to prevent occurrence of any future complications and avoid negative consequences.[2]

The term used to describe the bulk of childhood impairments is developmental abnormalities, or any physical or psychological illness that may prevent a child from developing cognitively, physically, or emotionally in relation to other children. The arrival of a disabled child may have an effect on every aspect of the family relations. Parents may find it challenging to identify a developmental issue.[3]

Quality of life as defined by the World Health Organization (WHO) is an individual's perception of his/her position in life in the context of the culture and value systems in which he/she lives, and in relation to his/her goals, expectations, standards, and concerns, Health-related QOL is a broad concept which includes many factors that are directly or indirectly related to health. [4]

Coping is defined as “efforts to prevent or diminish threat, harm, and loss or to reduce the distress” that we experience during times of adversity, self-care and care for others. Our study shows that the Slovak translation of the COPE Inventory is a reliable, externally valid, and well-structured instrument for measuring coping in the Slovak population.[5]

MATERIAL AND METHODS

Study Design and Participants

Non experimental Descriptive Research approach was adopted for this study in order to accomplish the objectives. In this study Descriptive research deals with the assessment of Care givers of children’s suffering with congenital anomalies level of perceived stress, their professional quality of life and coping measures to meeting the objectives. measures among the care givers of children suffering with congenital anomalies selected Pediatric hospitals of Bagalkot.

INSTRUMENTS

PART I: SOCIO-DEMOGRAPHIC DATA:

The first part of the tool consists of 13 items for obtaining information about the selected back ground factors such as Age, Relation, Education of mother, Education of Father, no of children’s, Family income, Residence, Family history of congenital anomalies, Type of marriage, No. of children’s suffering with congenital anomalies, Duration of children’s suffering with congenital anomalies.

PART II: PERCEIVED STRESS SCALE (PSS-10)

Perceived stress scale (PSS-10) was designed to assess the perceived stress. It asks about feelings and thoughts during the last month. which was comprehensively scored as level of perceived stress. Items 4,5,7 and 8 are scored in the reverse direction. Total scores Range from 0 to 40 are presented in each above component. Response options range from Low stress (0-13), Moderate stress 914-26) and High stress (27-40).

PART III: QUALITY OF LIFE WHOQOL-BREF scale (QOL-26)

Quality of life WHOQOL-BREF scale (QOL-26) scale was designed to assess the quality of life. It asks about during the last month which was comprehensively scored as level of compassion satisfaction, Care givers of children suffering with congenital anomalies. Quality of life range from 0-100 are presented in each above component.

Response options range from Very Poor (0-20), Poor (21-40), Moderate (41-60), Good (61-80) And Very Good (81-100).

PART IV: COPING MEASURES BREIF COPE scale (COPE-28)

Coping Measures BREIF COPE scale (COPE-28). scale was designed to assess the Coping Measures. It asks about during the last month which was comprehensively scored as level of compassion satisfaction, Care givers of children suffering with congenital anomalies. Coping Measures range from 0-4 are presented in each above component. Response options range from Low (0-34), Medium (35-68) and High (69-102).

Data collection procedures:

1. The data collection was carried out from 09-04-2025 to 25-05-2025, among Care givers of children suffering with congenital anomalies. In the BVVS HSK Hospital and Research Centre, Bagalkot & multispecialty hospital Bagalkot.
2. Permission was obtained from Dean, Medical superintendent and Managers of hospitals.
3. Data was collected from Care givers of children suffering with congenital anomalies. By explaining the purpose of this study.
4. Written consent was obtained from the study participants.

5. According to the convenience and Care givers of children data was collected.

Data Analysis:

Data analysis is a systemic organization and synthesis of research data and testing of research hypothesis using those data. The data obtained is analyzed in terms of objectives of the study using descriptive and inferential statistics.

RESULT

Part I: Socio-demographic variable

The socio-demographic characteristics of the respondents show that the majority of children 70 (84%) were in the age group of 0–4 years, followed by 11 (13%) in the age group of 4–8 years and 3 (3%) in the age group of 8–12 years. Most of the caregivers were mothers 69 (83%), while fathers constituted 15 (17%). Regarding religion, the majority 63 (75%) belonged to Hindu religion, followed by Muslims 16 (19%) and Christians 5 (6%). In relation to education, most mothers had higher education 38 (45%), while 33 (40%) had primary education. Among fathers, the majority 32 (38%) had completed PUC and 26 (31%) had higher education. Regarding number of children in the family, 47 (56%) had one child and 30 (36%) had two children. With regard to family income, 42 (50%) had a monthly income of ₹10,001–₹20,000. Most of the respondents 56 (67%) were from rural areas. Family history of congenital anomalies was absent in the majority 73 (87%) of families. Consanguineous marriage was reported by 66 (78%) respondents. Most families 76 (90%) had one child suffering from congenital anomalies, and the majority of children 44 (52%) had the condition for 0–1 year.

PART II: Assessment of perceived stress among care givers of children suffering with congenital Anomalies.

Table 1: Frequency and percentage distribution of care givers of children suffering with congenital Anomalies according their level of perceived stress (PSS-10). N=84

Levels of perceived stress			
Descriptions	**Scores**	**Frequency**	**Percentage**
Low	0-18	00	00
Moderate	19-37	84	100%
High	38-56	00	00

In this study results depicts that mean ± SD score of perceived stress among care givers of children suffering with congenital Anomalies was 31.02 ± 2.27, median was 31 and range was about 7.

PART III: Assessment of quality of life among care givers of children suffering with congenital Anomalies

Table 2: Distribution of care givers of children suffering with congenital Anomalies according their levels of quality of life (WHO BREF QOL-26)

Level of Quality of life			
Description	**Score**	**Frequency**	**Percentage**
Very poor	0-20	00	00
Poor	21-40	00	00
Moderate	41-60	2	3%
Good	61-80	73	86%
Very good	81-100	9	11%

PART IV: Assessment of coping measures among care givers of children suffering with congenital Anomalies

Table 3: Domain wise distribution of care givers of children suffering with congenital Anomalies according their level of coping measure BREIF COPE-28

Levels of coping measures			
Descriptions	**Scores**	**Frequency**	**Percentage**
Poor	0-40	00	00
Better	41-80	84	100%
Good	81 & Above	00	00

PART V: Finding out the correlation between perceived Stress, Quality of life and Coping measures.

Table 4: Co-relation of PSS-10, WHOQOL-26, BREF COPE-28 with congenital anomalies. N=84

variables	Quality of life		Coping measures	
	Pearson's r value	P value	Pearson's r value	P value
PSS-10	- 0.069	0.532	- 0.504	0.00001*
*: at the level of significance P<0.05				

Table shows that correlation of components of perceived stress scale, quality of life and coping measures.

Table shows that negative correlation between Perceived stress (PSS-10) and Quality of life (WHO-QOL) had shown (r=-0.0690, P=0.532) and between perceived stress and coping measures had shown significantly negative correlation (r=-0.504, P=0.00001)

Hence, the H1 is accepted and it depicts that there was a significant correlation between level of perceived stress (PSS-10) and coping measures BREIF COPE-28.

H1 is rejected and it depicts there was no significant correlation between level of stress and quality of life.

PART VI_Table 5: Association between the stress among care givers of children with their selected socio demographic variables. N=84

Sl. No	Socio demographic variables of stress among care givers of children	DF	χ^2 calculated value	Table value	p-value	Association
1	Child Age	2	0.51	5.99	0.77	No Significant Association.
2	Relation	2	0.30	5.99	0,58	No significant Association.
3	Religion	3	0.21	7.81	0,89	No Significant Association.
4	Education status of mother	4	5.22	9.49	0.26	No Significant Association.
5	Education status of father	4	2.70	9.49	0.60	No significant Association.
6	Number of Children	3	3.59	7.81	0.16	No significant Association.
7	Family income	3	9.62	7.81	0.021	* Significant Association.
8	Area of residence	2	2.71	5.99	0.25	No significant Association.
9	Family history of congenital anomalies	1	0.12	3.84	0.72	No Significant Association.
10	Type of marriage	1	5.39	3.84	0.02	* Significant Association
11	Number of children's suffering with congenital anomalies	2	0.39	5.99	0.52	No significant Association
12	Duration of children's suffering with congenital anomalies	3	2.74	7.81	0.25	No significant Association
13	Type of congenital anomalies	2	2.42		0.29	No significant Association

PART VII

Table 6: Association between the quality of life among care givers of children with their selected socio demographic variables

Sl. No	Socio demographic variables of stress among care givers of children	DF	χ^2 calculated value	Table value	p-value	Association
1	Child Age	2	2.18	5.99	0.33	No Significant Association.
2	Relation	2	.30	5.99	0.58	No significant Association.
3	Religion	3	1.31	7.81	0.51	No Significant Association.
4	Education status of mother	4	4.51	9.49	0.34	No Significant Association.

Sl. No	Socio demographic variables of stress among care givers of children	DF	χ^2 calculated value	Table value	p-value	Association
5	Education status of father	4	2.38	9.49	0.62	No significant Association.
6	Number of Children	2	0.27	5.99	0.87	No significant Association.
7	Family income	3	3.13	7.81	0.37	No Significant Association.
8	Area of residence	2	2.11	5.99	0.34	No significant Association.
9	Family history of congenital anomalies	1	0.21	3.84	0.64	No Significant Association.
10	Type of marriage	1	0.37	3.84	0.54	No Significant Association
11	Number of children's suffering with congenital anomalies	2	0.04	5.99	0.97	No significant Association
12	Duration of children's suffering with congenital anomalies	3	3.91	7.81	0.14	No significant Association
13	Type of congenital anomalies	2	4.27	5.99	0.11	No significant Association

PART VIII

Table: Association between the coping measures among care givers of children with their selected socio demographic variables

Sl. No	Socio demographic variables of stress among care givers of children	DF	χ^2 calculated value	Table value	p-value	Association
1	Child Age	2	0.42	5.99	0.80	No Significant Association.
2	Relation	2	0.02	5.99	0.62	No significant Association.
3	Religion	3	0.40	7.81	0.82	No Significant Association.
4	Education status of mother	4	5.56	9.49	0.23	No Significant Association.
5	Education status of father	4	3.34	9.49	0.50	No significant Association.
6	Number of Children	2	1.87	5.99	0.39	No significant Association.
7	Family income	2	1.61	5.99	0.65	No Significant Association.
8	Area of residence	2	2.43	5.99	0.29	No significant Association.
9	Family history of congenital anomalies	1	1.72	3.84	0.08	No Significant Association.
10	Type of marriage	1	0,013	3.84	0.90	No Significant Association
11	Number of children's suffering with congenital anomalies	2	0.95	5.99	0.62	No significant Association
12	Duration of children's suffering with congenital anomalies	3	3.91	7.81	0.24	No significant Association
13	Type of congenital anomalies	2	1.94	5.99	0.37	No significant Association

DISCUSSION

Findings of the study shown related to perceived stress shown that majority (100%) of care givers of children were having moderate level of

perceived stress, mean ± SD score of perceived stress among care givers of children was 31.02 ± 2.27, median was 31 and range was about 7.

Similar study was conducted by Pratima Ghimire, (2017) to assess the perceived stress among care givers of children suffering with congenital anomalies. The study results shown that mean ± SD of perceived stress score was 41.83 ± 7.15Similar study was conducted H Almulla (2012), to assess the perceived stress among care givers of children. The study results shown that mean ± SD of perceived stress score was 8.9 ± 4.67.[6]

Findings of the study shown that the components of quality-of-life results shown that mean ± SD and range of compassion satisfaction was 74.82 ± 6.74 and 38 respectively, followed by of perceived stress result was 22.62 ± 4.31 respectively.

The study results were found similar with study conducted by Khoshhal S, Al-Harbi K (2019), to assess the quality of life among care givers of children. The study results shown that mean ± SD of perceived stress score was 44.47 ± 4.12 [7].

Findings of the study shown that the components of coping measures results shown that mean ± SD and range of compassion satisfaction was 110.51 ± 26.35 and 44 and respectively, followed by of perceived stress result was 22.62 ± 4.31 respectively, quality of life results shown that mean ± SD and range of compassion satisfaction was 74.82 ± 6.74 and 38 respectively.[8]

Limitations

- Care givers of children who are admitted in selected pediatric hospitals of Bagalkot.
- 84 Care givers of children admitted in selected pediatric hospitals of Bagalkot.

Recommendations

An experimental study can be conducted to assess the effectiveness of stress management strategies among care givers of children.

A similar study can be conducted with large sample size to generalize the findings.

An exploratory study can be conducted to identify the predictors of stress among care givers of children admitted in selected pediatric hospitals of Bagalkot.

A study can be conducted to assess the level of knowledge and attitude on management of stress among care givers of children.

A comparative study can be conducted on Educated and non-educated care givers of children level of stress and quality of life.

CONCLUSION

The study concluded that caregivers of children with congenital anomalies experienced a moderate level of perceived stress. Most caregivers reported good to very good quality of life and compassion satisfaction. Coping measures among caregivers were also found to be good. The findings revealed a weak correlation between perceived stress, quality of life, and coping measures. A significant association was observed between family income and type of marriage with perceived stress among caregivers. These results highlight the importance of providing support and coping strategies to improve caregivers' well-being.

Ethical Clearance

Ethical clearance was obtained from the institutional ethical committee of BVVS Sajjalashree Institute of Nursing Sciences, Bagalkote.

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Conflict of interest: Nil

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