

A Survey on the Knowledge, Attitude, and Behaviour of Parents of Children with Cerebral Palsy in Special Schools in Sangli District.

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Abstract.

Background : Cerebral palsy is the most prevalent paediatric disability in world, a chronic illness with a complicated and varied appearance. It profoundly affects the psychological well-being and daily Lives of Both parents and caregiver, rising a child with cerebral palsy presents with various challenges including increased caregiving demand, financial strain and emotional stress. Lack of information will affect the parents' attitude and behaviour on a daily basis, which will hinder their children's development, while having knowledge fosters a cooperative and supportive attitude that will result in appropriate daily behavior and indirectly aid in the development of their children. The study focused on schools for specially abled in Sangli district. It adopts a holistic approach by assessing knowledge, attitude and behaviour simultaneously allowing for a comprehensive understanding of parental perspective and identifying critical areas of intervention.

Aim and objective: To explore the knowledge, attitude and behaviour of parents of cerebral palsy children in special schools in Sangli district. **Methodology:** An observational study was conducted among 145 participants in special schools of Sangli district .The study used a Google form in English and Marathi language to assess knowledge, attitude and behaviour of parents of cerebral palsy children in special schools in Sangli district. There were several questions for each domain that is knowledge, attitude and behaviour in above Google form, which were divided into three sections, one for each domain

Result: A total of 145 participants were included in the study. The analysis of the *knowledge-based questionnaire* revealed that a significant proportion of parents lacked adequate awareness regarding cerebral palsy (CP). This states poor knowledge amongst parents and need for awareness in this region . The attitude of parents towards their children was good and mother scored statistically higher than the fathers. The parental behaviour towards their children was good , but the parents expressed the disability of child has impacted their social and personal life.**Conclusion:** Need for awareness program among the parents to enhance their understanding regarding cerebral palsy. Understanding behaviour of parents towards their child can enable clinician to enhance their communication , involvement and adherence to therapy

Keywords: Knowledge,Attitude,Behaviour,Cerebral Palsy,Parents

INTRODUCTION

The word cerebral palsy refers to a collection of non-progressive conditions that show up as irregularities in posture and movement [1]. Alongside it, there may be other complications including epilepsy, speech, hearing, vision, and intellectual disability [4].Cerebral palsy is the most prevalent paediatric disability in world, a chronic illness with a complicated and varied appearance [5]. The effects of cerebral palsy on a child

psychological development have been extensively studied, and it has been discovered that children with cerebral palsy are more likely than their peers without cerebral Palsy to experience behavioural and emotional issues [9].

For most children with disability, a critical environmental factor is provided by their parents [4]. Cerebral Palsy profoundly affects the psychological well-being and daily Lives of Both parents and caregiver, rising a child with cerebral palsy presents with various challenges including increased caregiving demand, financial strain and emotional stress [8]. parents of children with cerebral palsy are likely to experience significant variability in caregiving demands and expectations [4]. it is often overlooked how much stress comes with raising children with cerebral palsy, apart from their mental health problem, the parent also face, social exclusion, social stigma and challenges within their family and community [6]. For these children affection, naturally maximise their therapy, exercise and treatment, in addition to displaying love and care parents show their approval of their children by giving them opportunities [7]. parental views and child rearing techniques are significant predictors of children's adaptability and developmental outcomes [10]. Children who have weaker gross motors skills, lower finances, and disrupted, family relationship, their families frequently recognise greater needs [11]

Additionally, compared to parents of Healthy children, these parents experience higher levels of despair and lower quality of life [12]. The functioning of family and the general well-being of child and family members can be impacted by behavioural issues in children with developmental disability [13]. The crucial role parents play in their children's health care is a complicated series of interactions between them. As a result, it depends on good parenting techniques, kid compliance and generally positive healthy parent child relationship [14]. given the crucial role, parents play in helping and caring for their affiliated children, a thorough and exploratory investigation into their understanding, acceptance, psychosocial difficulties and expectations from Rehabilitation service is necessary [15]. Lack of information will affect the parents' attitude and behaviour on a daily basis, which will hinder their children's development, while having knowledge fosters a cooperative and supportive attitude that will result in appropriate daily behavior and indirectly aid in the development of their children [2].

NEED OF THE STUDY.

The study focuses on special schools in Sangli district. It adopts a holistic approach by assessing knowledge, attitude and behaviour simultaneously allowing for a comprehensive understanding of parental perspective and identifying critical areas for intervention. The study utilizes a Google form in Marathi language, a novel approach in this context to collect data effectively from a parent. This ensures better accessibility and better understanding of questionnaire leading to more accurate and reliable data collection. Further more the findings are utilized to determine the need for awareness programs among parents, ultimately, empowering them to make informed decisions regarding their child's condition and care.

3.1 population and setting.

Study design: An observational study

Study setting: The study was conducted in special schools of Sangli district

Study population: Parents of children diagnosed with cerebral palsy and studying in special schools of sangli district.

Sample size: 145 parents.

Inclusion criteria:

- Parents willing to participate in the study
- Parents of children diagnosed with cerebral palsy studying in special schools in sangli district.

Exclusion criteria;

- Parents not willing to participate in the study.

Sampling method: convenient sampling.

3.2 Procedure.

This study commenced following the approval from scientific committee and institutional research ethics. Committee eligibility have assessed using inclusion exclusion criteria and inform consent is obtained after providing detailed information about the studies, purpose, procedure, risk and benefits. A comprehensive baseline assessment have been done and the outcome measures have been assessed . Findings are reported and documented confidentially about the study participants data and is maintained throughout the study.

3.3 Statistical Analysis.

The data obtained was entered in a Microsoft Excel spreadsheet and was analyzed in the SPSS software version 25. Mean and standard deviations were calculated for the data set and appropriate statistical tests were employed depending on the type of data obtained. The level of significance was fixed at 5% ($p < 0.05$). b)

RESEARCH METHODOLOGY

An observational study was conducted among 145 participants in special schools of sangli district .The study used a Google form in English and Marathi language to assess knowledge, attitude and behaviour of parents of cerebral palsy children in special schools in Sangli district. There were several questions for each domain that is knowledge, attitude and behaviour in above Google form, which were divided into three sections, one for each domain.

3.1Population and Sample

A total of 145 participants were included in the study. The majority of the children were aged between 11–13 years (46.9%), followed by 8–10 years (27.6%). Most children were first-born (55.2%), while second-born children comprised 44.1% and only 0.7% were third-born or higher. This suggests that majority of children were studying in middle school. cerebral palsy was most common in first born child. Regarding the geographical distribution, participants were predominantly from Walwa ,Taluka ,Miraj , followed by Khanapur and Jat . Other talukas had relatively lower representation. This study was carried out in Sangli district and thus it may show social attributes of this region.

IV. RESULTS AND DISCUSSION

A total of 145 participants were included in the study. The analysis of the *knowledge-based questionnaire* revealed that a significant proportion of parents lacked adequate awareness regarding cerebral palsy (CP). This states poor knowledge amongst parents and need for awareness in this region . The attitude of parents towards their children was good and mother scored statistically higher than the fathers. The parental behaviour towards their children was good .

Table 1: Frequency and Percentage of Demographic variables(N = 145)

Category	Variable/Group	Frequency	Percent (%)
Age of Child (Years)	5–7	14	9.7
	8–10	40	27.6
	11–13	68	46.9
	14–16	23	15.8
Birth Order	First child	80	55.2
	Second child	64	44.1
	Third or higher	1	0.7
Taluka / City	Miraj	39	26.9
	Walwa (incl. variants)	45	31
	Khanapur	16	11
	Jat	8	5.5
	Kadegaon	7	4.8
	Palus	6	4.1
	Tasgaon	6	4.1
	Sangli Municipality	5	3.4
	Atpadi	4	2.8
	Shirala	4	2.8
	Others (Dry, spelling variants)	5	3.4
Parent's Profession	Agriculture-related		
	Farmer/Shetkari	23	15.8
	Agriculture	5	3.4
Home-related	Housewife/Homework/Housework	28	19.3
	Housekeeper/Gharkam	2	1.4
Labour & Skilled Work	Driver/Bus/Auto/Peon	16	11
	Worker/Construction/Factory	7	4.8
	Carpenter/Mechanic	4	2.8

	Watchman/Wage labor	3	2.1
Business & Shops	Shop/Clothes/Dukan	17	11.7
	Business/Parlor/Service	16	11
	Grocery/Vegetable vendor	4	2.8
	Iron shop/Hotel/Private job	5	3.4
Formal Jobs	Teacher/Bank/Army	4	2.8
	Job/Staff	11	7.6
Other/Unclear	No/Work/Car	4	2.8
Gender of the Child	Boy	84	57.9
	Girl	61	42.1
Respondent's Relationship to Child	Father	91	62.8
	Mother	54	37.2

Table 2. Frequency and Percentage distribution of knowledge based questionnaire

Variable Name	Response	Frequency	Percent (%)
Do you know the cause of your child's disability?	Yes	32	22.1
	No	112	77.2
	Maybe	1	0.7
You believe that cerebral palsy is a lifelong condition.	Yes	88	60.7
	No	36	24.8
	Maybe	21	14.5
Do you know the cause of cerebral palsy?	Yes	35	24.1
	No	97	66.9

	Maybe	13	9
Do you think cerebral palsy is a contagious disease?	Yes	63	43.4
	No	75	51.7
	Maybe	7	4.8
Does cerebral palsy always affect a child's intelligence?	Yes	78	53.8
	No	44	30.3
	Maybe	23	15.9
Do you know what cerebral palsy is?	Yes	45	31
	No	86	59.3
	Maybe	14	9.7
Do you believe that cerebral palsy is a hereditary disease?	Yes	69	47.6
	No	67	46.2
	Maybe	9	6.2
Do you believe that cerebral palsy can be cured?	Yes	81	55.9
	No	31	21.4
	Maybe	33	22.8
Do you believe that a rehabilitation program will improve your child's quality of life?	Yes	59	40.7
	No	20	13.8
	Maybe	66	45.5
Do you believe your child may have a sensory, hearing, or visual impairment?	Yes	92	63.4
	No	36	24.8
	Maybe	17	11.7
Do you believe your child's limb is connected to severe cerebral palsy?	Yes	101	69.7
	No	29	20
	Maybe	15	10.3
Do you think drooling and difficulty swallowing are related to your child's illness?	Yes	93	64.1

	No	35	24.1
	Maybe	17	11.7

Table 3. Frequency and Percentage distribution of attitude questionnaire

Variable name	responses	frequency	%
A child with cerebral palsy is stigmatized.	Agreed	20	13.8
	Disagree	125	86.2
Parents participate in their child's development	Agreed	117	80.7
	Disagree	28	19.3
Parents should step in when a child acts aggressively toward others or themselves.	Agreed	110	75.9
	Disagree	35	24.1
You feel positive about your child's abilities.	Agreed	86	59.3
	Disagree	59	40.7
You feel supported by your family and friends.	Agreed	110	75.9
	Disagree	35	24.1
Do you believe that children with cerebral palsy should have the same opportunities as other children?	Agreed	118	81.4
	Disagree	27	18.6
A child with cerebral palsy attracts more attention than other children.	Agreed	111	76.6
	Disagree	34	23.4
Patients with cerebral palsy require more expensive care.	Agreed	105	72.4
	Disagree	40	27.6
The affected child is more dependent compared to siblings.	Agreed	108	74.5
	Disagree	37	25.5
I am confident about handling my child's needs	Agreed	118	81.4
	Disagree	27	18.6
A sick child needs the help of his parents to meet the demands of the community.	Agreed	48	33.1

	Disagree	97	66.9
A child with cerebral palsy will have a normal future.	Agreed	108	74.5
	Disagree	37	25.5

Table 4. Frequency and Percentage distribution of behaviour questionnaire

Variable Title	Response	Frequency	Percent (%)
Children with cerebral palsy will be treated differently from their peers	Agreed	118	81.4
	Disagree	27	18.6
It is necessary to seek government or non-government help for a child with cerebral palsy	Agreed	107	73.8
	Disagree	38	26.2
More funds are spent on the affected child	Agreed	88	60.7
	Disagree	57	39.3
You are very attached to your child with cerebral palsy.	Agreed	95	65.5
	Disagree	50	34.5
Your child has had an impact on your social life.	Agreed	73	50.3
	Disagree	72	49.7
Your child has influenced your work.	Agreed	101	69.7
	Disagree	44	30.3
engage in playful and interactive activities with my child.	Agreed	81	55.9
	Disagree	64	44.1
I feel isolated and inadequate in my role as a parent.	Agreed	104	71.7
	Disagree	41	28.3
Your relationship with your other children has been affected.	Agreed	80	55.2

	Disagree	65	44.8
God will reward you for taking care of your child.	Agreed	109	75.2
	Disagree	36	24.8
Others felt your sympathy because of a sick child.	Agreed	109	75.2
	Disagree	36	24.8
Having a child with cerebral palsy has affected your mental life.	Agreed	104	71.7
	Disagree	41	28.3
Your child has changed your lifestyle.	Agreed	102	70.3
	Disagree	43	29.7

Table 5: Determining the association of knowledge, attitude and behaviour in relation to parents

Variables	knowledge	Attitude	behaviour
Parents	1.529(0.023)*	2.632(0.043)*	2.072(0.39)*
	Mean $\pm$ S.D.	Mean $\pm$ S.D.	Mean $\pm$ S.D.
Mother	10.32 $\pm$ 3.87	9.02 $\pm$ 2.01	8.18 $\pm$ 2.19

The aim of research was to assess knowledge ,attitude and behaviour of parents of children with cerebral palsy.

The parents of cerebral palsy children play a major role in their journey . the quality of life of the children is based on parents knowledge about the condition and their attitude and behaviour towards their children. Our study focuses on parents of cerebral palsy children studying in schools for speacially abled in Sangli district .it develops a holistic approach by assessing knowledge ,attitude and behaviour simultaneously allowing for comprehensive understanding of parental perspective and identifying critical areas for intervention . the study utilises google form in Marathi language , a novel approach in this context to collect data effectively from parents.

A total of 145 participants were included in the study. The majority of the children were aged between 11–13 years (46.9%), followed by 8–10 years (27.6%). Most children were first-born (55.2%), while second-born children comprised 44.1% and only 0.7% were third-born or higher. This suggests that majority of children were studying in middle school. cerebral palsy was most common in first born child.

Regarding the geographical distribution, participants were predominantly from Walwa ,Taluka ,Miraj , followed by Khanapur and Jat . Other talukas had relatively lower representation. This study was carried out in Sangli district and thus it may show social attributes of this region.

When considering parental occupation, a diverse range of professions was observed. The largest group were housewives and homemakers (19.3%), followed by individuals involved in agriculture and farming (19.2%

combined). A notable portion was also engaged in business and shop-related activities (25.5%), and others held formal or skilled jobs such as drivers, factory workers, or government employees.

The gender distribution of the children showed that boys accounted for 57.9% while girls represented 42.1%. In terms of the respondent's relationship to the child, fathers constituted 62.8% of the participants and mothers made up 37.2%.

The analysis of the *knowledge-based questionnaire* revealed that a significant proportion of parents lacked adequate awareness regarding cerebral palsy (CP). While 22.1% of respondents knew the cause of their child's disability, 77.2% did not. Similarly, only 24.1% reported knowing the cause of cerebral palsy, with 66.9% denying any knowledge. Interestingly, 60.7% acknowledged CP as a lifelong condition, but misconceptions persisted: 43.4% believed CP to be contagious, and 47.6% considered it hereditary. About 55.9% believed CP could be cured, and 40.7% felt rehabilitation could improve their child's quality of life. Notably, 63.4% suspected sensory or perceptual impairments in their child, while 69.7% attributed limb issues to CP. Furthermore, 64.1% associated drooling and swallowing difficulties with the condition, indicating partial clinical awareness.

This states poor knowledge amongst parents and need for awareness in this region .

In terms of *attitudes*, the majority (86.2%) did not view children with CP as stigmatized. Most parents (80.7%) actively participated in their child's development and believed that children with CP should have equal opportunities (81.4%). A high proportion (81.4%) expressed confidence in handling their child's needs, reflecting positive engagement. However, only 33.1% agreed that a sick child needs community help, highlighting possible gaps in seeking external support.

The attitude of parents towards their children was good and mother scored statistically higher than the fathers.

The *behavioural questionnaire* responses reflected both emotional impact and adaptive changes among caregivers. A considerable number (81.4%) believed children with CP are treated differently. Most parents (73.8%) agreed on the need for governmental or organizational support, and 60.7% reported increased expenditure. The psychosocial toll was evident—71.7% felt mentally affected, 71.7% felt isolated or inadequate, and 70.3% acknowledged lifestyle changes due to caregiving responsibilities. Nonetheless, emotional bonding remained strong, with 65.5% expressing deep attachment, and 75.2% believing they would be spiritually rewarded for caregiving. The parental behaviour towards their children was good , but the parents expressed the disability of child has impacted their social and personal life.

In previously held studies on knowledge attitude and behaviour of caregiver and parents had higher score value of attitude than behavior and knowledge where caregivers have a significant lack of expertise in managing emergency situations ,it indicates a gap in care that may have potentially fatal consequences[16].

In a earlier study helped to find impact of educational program on parental knowledge of cerebral palsy stated due to smaller sample size and probable prevalence of childrenwith cerebral palsy in that city ,none of the parents were able to accurately explain the term cerebral palsy at the time of diagnosis,even after intervention .additionally,nearly 18.7% of parents did not follow up following educational intervention [1].

In our study the results show lack of knowledge in parents however mothers have scored higher than fathers in the context of knowledge as well as attitude .

The attitude of parents towards the child with cerebral palsy was good as parents did not view children with cp as stigmatized and reflected positive engagement.

The parental behavior towards their children was good but the parents expressed the disability of child has impacted their personal life.

Limitation :

There are some limitations in this study .firstly ,using a self reported questionnaire creates difficulties regarding the potential for inaccurate responses because, particularly for delicate questions participants may provide a socially acceptable response rather than a accurate one. Data reliability may also be impacted by response bias ,which occurs when individuals routinely respond with yes or no without fully understanding the questions.

Conclusion:

The study concludes there is need for awareness program among the parents to enhance their understanding regarding cerebral palsy. Understanding behaviour of parents towards their child can enable clinician to enhance their communication , involvement and adherence to therapy.

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