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TO ASSESS THE COGNITIVE AND PSYCHOSOCIAL BEHAVIOURAL PROBLEMS AMONG DEAF AND DUMB CHILDREN IN SELECTED DEAF AND DUMB SCHOOLS

Nursing

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ABSTRACT

Communication is the process through which one can interact with world. For a child with hearing loss, the biggest problem is learning to communicate. Because she/he cannot hear words clearly, it is much more difficult for her /him to learn to speak. So she/he has trouble both understanding what people want, and telling them what she/he wants. This can lead to loneliness, frequent disappointments and misunderstandings, both for the child and others. It is no surprise, then, that children with hearing loss sometimes are slow in learning to relate to other people, feel lonely or forgotten, or develops behaviour problems. Numerous studies shows that the development of deaf and hard of hearing students is faced with special challenges and there is increased prevalence of psychosocial problems in deaf and hard of hearing children. There is also incidence of declined cognitive function in deaf and dumb children to obstacles in learning and language development.

Objectives:

1. To assess the cognitive problems of deaf and dumb children in selected deaf and dumb school at Kolhapur.
2. To assess the psychosocial behavioural problems of deaf and dumb children in selected deaf and dumb school at Kolhapur.
3. To find correlation between cognitive problems and psychosocial behavioural problems among deaf and dumb children.
4. To find the association between cognitive problems with selected socio demographic variables.
5. To find association between psychosocial behavioural problems with selected socio demographic variables.

Method: The research approach used for the study was Quantitative Descriptive Survey approach, A Quasi-experimental, Non Experimental Descriptive Research Design was used, which consisted a group of 87 samples who were selected by using Non Probability Purposive Sampling Technique. Data was collected by using Socio Demographic Variables, Cognitive Function Test Based on Raven's Matrices and Modified Conner's Teachers Rating Scale. **Result:** Results revealed that majority of deaf and dumb children having cognitive as well as psychosocial behavioural problems and there is strong positive correlation between cognitive and psychosocial behavioural problems. There is association found between cognitive problems and selected socio demographic variables such as age, type of family and mode of communication. Also there is association found between psychosocial behavioural problems with selected socio demographic variables. **Interpretation And Conclusion:** The study revealed that majority of deaf and dumb children were having poor cognitive function i.e. having more cognitive problems, as well as most of the deaf and dumb children having high psychosocial behavioral problems.

KEYWORDS

Assess: Cognitive Problems: Psychosocial behavioral problems: Deaf and dumb Children: Deaf and dumb school.

INTRODUCTION

Communication is the way in which we understand what is said to us and the way we say or express to other people our thoughts, needs and feelings. People who can hear communicate through speech. For most growing children, hearing and language are very important for getting to know, understand and relate to the people and things around them.1

Deafness means loss of hearing and it may be partial or total. The WHO definition of "deafness" refers to the complete loss of hearing ability in one or two ears. The cases include in this category will be those having hearing loss more than 90dB in better ear(profound impairment) or total loss of hearing in both the ears. The WHO definition of "hearing impairment" refers to both complete and partial loss of ability to hear. A deaf and dumb person so isolated from family and friends and greeted by unsympathetic attitude he/ she is often depressed and needs psychological counselling. 360million people in the world suffer from disabling hearing loss. This constitutes a substantial 5.3% of the world's population. The prevalence and incidence of hearing impairment in India also substantially high.2

Most people consider hearing loss and cognitive impairment as normal when they get older. However, research has revealed a link between hearing loss and mild cognitive impairment. According to the research, people with hearing loss were two times more likely to develop cognitive impairment compared to people with normal hearing. When you communicate with someone, your brain processes the incoming sounds you receive so you can understand what you hear.The greater workload may use resources that your brain could use for other activities such as learning and committing what you hear to memory. The increase in listening effort can cause listening fatigue and cognitive overload.3

Hearing loss can also have lots ofinfluence on the cognitive functions of children (especially with language learning), some sort of things which include; vocabulary, sentence structure, speaking, academic achievement and other social functions.3

A comparative study was conducted to assess the frequencies of behavioural problems among hearing impaired children with cochlear implant. 71 CI children compared with normal hearing children. Data was collected by parents using child behaviour checklist and by teachers using teachers report form. Results revealed that, CI children reported similar frequencies of behavioural problems to the normative sample. Fair to low parent-teacher agreements were found on the behavioural problem scales. A significantly higher frequency of behavioural problems was reported in children with low speech perception and receptive vocabulary at school.4

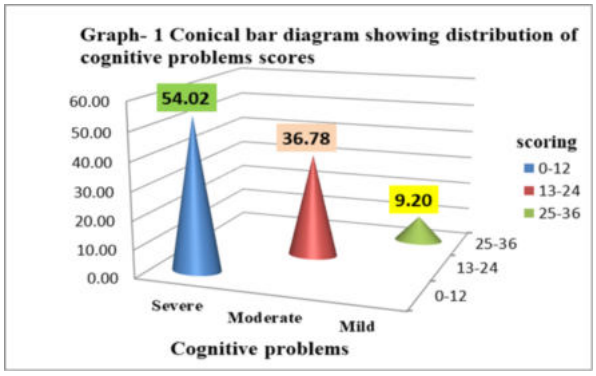
METHODS AND DATA COLLECTION

After an extensive review of literature; referring the books and journal as well as discussion with the guide. The tool is developed and sent for validation to experts. According to experts and guide's suggestion changes are made in the tool and the tool is finalized for the main study. The tool consists of three sections Socio-Demographic Variables, Cognitive Function Test Based on Raven's Matrices and Modified Conner's Teachers Rating Scale. First section deals with the 8 items of socio-demographic variables such as in relation to Age in years, Gender, Family history of deafness, Habitat, Degree of deafness, Type of family, mode of communication and Use of hearing device.Second section consists of 30 questions, among which 21 questions are multiple choices, match the pair 3 questions, drawing and coloring 3 questions and the remaining 3 are numerical quiz and third section deals with 25 Statements regarding behavior problems of children.

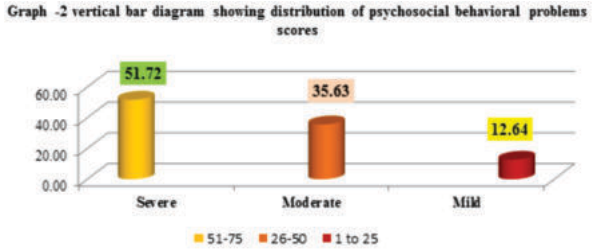
RESULT

The result shows that According to cognitive function test scores

47(54.02%) of the children were having poor cognitive function i.e. severe cognitive problems, 32(36.78%) of them were having average cognitive function i.e. moderate cognitive problems and 8(9.20%) were having good cognitive function i.e. mild cognitive problems. It indicates that most of the deaf and dumb children having moderate to severe cognitive problems.



According to modified Conner's teachers rating scale scores 45(51.72%) of the children were having severe psychosocial behavioural problems, 31(35.63%) of them were having moderate psychosocial behavioural problems and 11(12.64%) were having mild psychosocial behavioural problems.



The calculated 'r' value is 0.89. There is strong positive correlation between cognitive problems and psychosocial behavioural problems. Hence H01 is rejected and H1 is accepted.

The tabulated't' value (ttab) is less than calculated't' value (tcal) for variables like age (45.96>9.49), type of family (8.84>5.99) and mode of communication (13.23>5.99). Therefore there is significant association between cognitive problems with their selected socio-demographic variables like age, type of family and mode of communication. Hence H02 is rejected and H2 is accepted.

The tabulated't' value (ttab.) is lesser than calculated't' value (tcal) for variables like age (47.03>9.49), type of family (10.96>5.99) and mode of communication (11.62>5.99). Therefore there is significant association between psychosocial behavioural problems with their selected socio-demographic variables like age, type of family and mode of communication. Hence H03 is rejected and H3 is accepted.

DISCUSSION

The present study had been undertaken to assess the cognitive and psychosocial behavioral problems among deaf and dumb children in selected school at Kolhapur.

1. Findings Related To Distribution Of Selected Socio-demographic Variables Of Participants.

In the present study, out of 87 deaf and dumb children majority of the participants 38(43.68%) were in the age group of 06-08 years where as minor 18(20.69%) belonged to the age group of above 8- 10 years.

A study with contradictory findings was conducted on, executive functions and behavioural problems in deaf and hard of hearing students, which shows that most of the participants 103(48.1%) belonged to age group 9-13 year.[5]

In the present study, out of 87 deaf and dumb children majority of the participants 59 (67.82%) were having family history of deafness and minor 04(4.60%) having family history of both parents with deafness.
A study with similar findings was conducted on, executive functions and behavioural problems in deaf and hard of hearing students. Which shows majority of the participants 175(81.8%) were having no family history of deafness and minor 15(07%) were having family history of defness.[6]

2. Findings related to distribution of samples according to cognitive problems score.

According to cognitive function test scores 47(54.02%) of the children were having poor cognitive function, 32(36.78%) of them were having average cognitive function and 8(9.20%) were having good cognitive function.

A study with contradictory findings was conducted on, cognitive development in deaf children in Mysore the findings says that 4% of the deaf children were at the average level in cognitive development, 96% were above average.[7]

3. Findings related to distribution of samples according to psychosocial behavioural problems score.

According to modified Conner's teachers rating scale scores 45(51.72%) of the children were having severe psychosocial behavioral problems, 31(35.63%) of them were having moderate psychosocial behavioral problems and 11(12.64%) were having mild psychosocial behavioral problems.

A study with similar findings was conducted in Surat regarding the psychosocial behavioral problems among deaf and dumb children, the findings says that 4.5% were not able to do any work, not understand anything (3.45), loneliness (2.3%), harassed by other children (1.1%) and behaved aggressively (1.1%) depression is much higher inresidential aged care facilities and about 34.7% of aged care residents suffered from depression.[5]

4. Findings Related To Correlation Between Cognitive Problems Score And Psychosocial Behavioral Problems Score Among Deaf And Dumb Children.

In this study, the calculated 'r' value is -0.89. It indicates that there is strong negative correlation between cognitive function and psychosocial behavioral problems. Therefore, children with poor cognitive function having more cognitive problems. Hence there is positive correlation between cognitive problems and psychosocial behavioral problems.

These findings were supported by a study conducted on executive functions and behavioural problems in deaf and hard of hearing children and found there was an significant correlations were observed consistently but with a wide range of magnitude in the direction expected: Increased problems with executive functions are connected with a higher probability of behavioural problems occurring and go hand in hand with a lower level of communicative competence in the students. Communicative competence also correlates with the social–emotional development of D/HH students: The more competent the children the less likelihood of behavioural problems arising.[5]

5. Findings related to association of cognitive function test score with their selected socio demographic variables among Deaf and dumb children.

In this study, there is significant association between the cognitive problems with their selected socio-demographic variables.

A study with similar findings was conducted on, cognitive functioning in deaf children using cochlear implants, which revealed that the CI not only enhances communication skills but may improve cognitive functioning in deaf children. Current results demonstrated that the children received CI at young ages had better cognitive improvements.[8]

6. Findings related to association of psychosocial behavioural problems with their selected socio demographic variables among Deaf and dumb children.

In this study, there is significant association between the psychosocial behavioral problems with their selected socio-demographic variables.

These findings were supported by a study conducted on psychosocial development of five year old children with hearing loss, which revealed that psychosocial functioning was significantly associated with all child and family factors including non-verbal cognitive ability, presence of disabilities, home communication mode. There were no significant relationships found among severity of hearing loss, device

used, and age at intervention.[9]

CONCLUSION

This study concludes that majority of the deaf and dumb children having cognitive as well as psychosocial behavioural problems. Use of different nonverbal communication technique according to need of children may reduce the cognitive problems of deaf and dumb children. Good parental support and healthy home and school environment may help to reduce the psychosocial behavioural problems of children.

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