



COMPARATIVE STUDY OF KNOWLEDGE AND ATTITUDE TOWARDS SELECTIVE MUTISM AMONG MEDICOS AND NON- MEDICOS STUDENTS

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Abstract

Background: Selective Mutism (SM) is a debilitating childhood anxiety disorder, manifested by an unvarying inability of children to communicate verbally in certain social environments, despite possessing the capability to speak in others. Identifying and intervening early in Selective Mutism cases is crucial to enhance the prognosis for affected children. The significance of this study lies in its endeavor to understand the knowledge and perceptions surrounding this condition among different groups of people, primarily focusing on medical professionals and individuals without medical backgrounds.

Objective: This research aims to conduct an in-depth comparative analysis to gauge the levels of awareness and understanding of Selective Mutism among individuals with medical training (medicos) and those without (non-medicos), exploring the perceptions and knowledge gaps existing in these distinct groups.

Methods: A meticulous cross-sectional research study was executed employing an online survey method, spanning over a period of six months to gather diverse responses and insights related to Selective Mutism.

Results: The outcomes of the study uncovered that awareness of Selective Mutism was markedly higher in medicos, with 29.5% being aware, as opposed to only 8.21% of non-medicos having knowledge of the condition. Additionally, an evident gender imbalance was noted in both groups, with a higher percentage of females demonstrating awareness of the disorder compared to their male counterparts.

Conclusion: The results of this investigation underscore the prevalent dearth of knowledge and awareness regarding Selective Mutism among the broader population. This lack of understanding can propagate social stigma and act as a barrier to the early detection and treatment of this disorder. The research underscores the imperative need for extensive educational initiatives and awareness drives to foster early identification and intervention strategies for individuals grappling with Selective Mutism, thereby facilitating improved mental health outcomes.

Keywords: Selective Mutism, Anxiety Disorder, Behavioral Interventions, Awareness, Medical Professionals, General Population.

1. INTRODUCTION

Selective mutism (SM) is a childhood anxiety disorder that is characterised by a consistent failure to speak in specific social situations, despite the ability to speak in other settings. SM is usually diagnosed in early childhood, with a median age of onset of 3 to 4 years, and is more common in females than males¹. The condition may significantly harm a child's social, emotional, and academic growth as well as their connections with their family and peers². The illness is frequently incorrectly or underdiagnosed, which can delay proper care and worsen its effects on those who are affected. Due to the paucity of studies on the brain processes causing the condition, the histology foundation of SM is poorly known. Additionally, some studies have revealed that SM sufferers may differ from normally developing people in terms of their brain's composition and functionality³.

According to fMRI research, children with SM exhibit less Amygdala and Anterior Cingulate Cortex (ACC) activity in response to social cues than children without the disorder do. The ACC is engaged in cognitive control and emotion regulation, whereas the amygdala is a crucial component involved in the processing and regulation of emotions, notably fear and anxiety⁴. The decreased activity in these areas raises the possibility that children with SM have dysfunctional brain circuits that are responsible for controlling their emotions and behaviours. Children with selective mutism exhibit a variety of symptoms, including anxiety, oppositional behaviour, speech and language problems, and developmental challenges⁵. The FSSM is a parent-reported tool that assesses the severity of SM symptoms as well as providing a diagnostic scale that may be used to see if the disorder's key characteristics are present, supporting the diagnosis. Because the lack of communication in the classroom is the major reason parents take their child to the doctor, a study of SM symptoms in the educational context is very important. In order to do this, it is suggested that you observe the muteness in class and at other school functions. When this is not possible, the School Speech Questionnaire (SSQ) may be a helpful tool to determine how frequently pupils participate in non-speaking behaviours from the teacher's perspective³.

To improve outcomes for children with SM, early detection and intervention are essential⁶. Similar to other children with anxiety disorders, treatment guidelines for SM often involve Cognitive behavioural Therapy (CBT), medication with Selective Serotonin Reuptake Inhibitors (SSRI), or a combination of both. Given the likelihood that the therapist's engagement with a child who is selectively mute would be hindered, it is suggested to appropriately alter psychotherapy processes to make the best possible contact with the patient⁷. Due to a lack of knowledge and comprehension of the illness among medical professionals and the general public, many people with SM do not receive proper care, even when effective therapies are readily available. SM is not as rare as formerly believed, with prevalence estimates ranging between 0.7% and 2%. However, in this group of people, externalising actions and pessimistic personality traits may indicate a wish to avoid or escape anxiety rather than being present at heightened or clinical levels, resulting in unpleasant social obligations or situations as well as attention-seeking behaviours⁹. In emotional/behavioural mutism (7.7%), which likewise exhibited a high female frequency, impairments with executive functioning, oppositional and labile behaviour, and a 10:1 female to male ratio were particularly noticeable¹⁰.

2. MATERIAL AND METHODS

The study was a cross sectional study conducted in a private institution in Komarapalayam. The entire study was carried out for six months.

2.1 General procedure

The entire study was planned for a period of 6 months. It includes three phases, The first phase comprises identifying the scope of work by conducting literature review and framing a questionnaire. Framing a questionnaire. The evaluation process and interpretation were carried out in the third phase.

The Sample size of our study was 561. The data collection form was a self-structured questionnaire framed, validated, and distributed. The questionnaire was divided into four sections. Section 1: Social demographic details of participants. Section 2: Knowledge and attitude based data of the respondents.

2.1.1. Inclusion criteria

- All genders.
- Age above 18 years.

3. RESULT AND DISCUSSION

Table 1: Distribution of Socio-demographics of participants

S.NO	SOCIO-DEMOGRAPHIC DETAILS		NO OF PARTICIPANTS	PERCENTAGE (%)
1.	Gender	Male	308	54.9%
		Female	253	45.1%
2.	Course level	Undergraduate	469	83.6%
		Postgraduate	92	16.4%
3.	Education level	Medicos	281	50.1%
		Non-medicos	280	49.9%
4.	Residence	Rural	193	34.4%
		Urban	368	65.6%

Of 561 responses, 308 (54.9%) were males and 253 (45.1%) were females and no transgender people. The education level of participants was shown as 281(50.1%) were medicos, and 280(49.9%) were non-medicos, and from them, 469(83.6%) students belonged to undergraduate and 92(16.4%) students belonged to postgraduate. Their residence was 368(65.6%) in urban areas, while 193(34.4%) in rural areas. (Table 1).

Table 2: Knowledge and attitude based data of the respondents.

S.NO	QUESTIONNAIRE			NO OF RESPONSES	PERCENTAGE (%)
1.	Have you heard about selective mutism	Medicos (n=281)	Yes	83	29.53%
			No	198	70.46%
		Non-medicos (n=280)	Yes	23	8.21%
			No	257	91.78%
2.	From whom are you know about Selective mutism (n=106)	Academic		27	25.47%
		Friends and family		20	18.86%
		Internet		47	44.33%
		Other source		7	6.60%
		Friends and Family + Internet source		5	4.71%
3.	Who will be affected more? (n=561)	Male		207	36.89%
		Female		254	45.27%
		Both		100	17.82%
4.	Do you know any affected people? (n=106)	Yes		50	47.16%
		No		56	52.83%
5.	Does selective mutism get better with treatment (n=106)	Yes		79	74.52%
		No		27	25.47%
6.	What will be your comfortable way of communication (n=106)	Verbal		26	24.52%
		Non-verbal		80	75.47%

There were 106 participants, 83 (29.5%) of them were medical students, 23 (8.21%) were not, and of these, 39 (24.84%) men, 44 (35.48%) women, and 17 (11.25%) men and 6 (4.65%) women, respectively, knew about selective mutism (Table 2.1). Table 2.2 depicts that among 106 students who knew about SM, students source of knowledge were 27(25.47%) from Academic, 20(18.86%)

from Friends & Family, 47(44.33%) from Internet source, 5(4.71%) from Friends & Family and Internet source and 7(6.60%) from some other sources. In the research, which included 561 participants, 176 (31.3%) answered that men would be more affected, 273 (48.6%) said that women would be more affected, and 112 (19.9%) claimed that both genders would be affected. In this study, physicians stated that females are more afflicted, whereas non-physicians stated that men are more affected. Similar to this, Manassis et al.'s pertinent study from 2007 revealed that Females⁸ had a greater prevalence of selective mutism (Table 2.3). In our survey, 106 students claimed to have knowledge of selective mutism; of them, 50 (47.16%) knew individuals affected by the condition, whereas 56 (52.83%) did not (Table 2.4). Out of the 106 students that were aware of SM, 79 (74.5%) thought that it could be treated and 27 (25.5%) thought that it could not be treated (Table 2.5). 26 (24.52%) of the 106 students answered that verbal communication is their preferred method of communication, while 80 (75.47%) said that non-verbal communication is their preferred method. It also demonstrates that selective mutism is not always indicated by a lack of communication (Table 2.6).

4. CONCLUSION

This study uncovers a substantial gap in knowledge and cognizance concerning Selective Mutism across medical practitioners and the broader community. Those within the medical field exhibit a more profound insight into the disorder, acknowledging its ties to anxiety, fear, and restrained verbal communication. The investigation additionally discloses that Selective Mutism predominantly impacts females, with a higher level of awareness observed among female students. Disseminating accurate information about Selective Mutism is pivotal for mitigating societal prejudices and for cultivating an environment of support for the children who suffer from it. Enhanced understanding and acceptance, coupled with apt intervention strategies, are essential steps toward empowering these children to overcome their silence and enhance their overall quality of life. It is vital that society, and particularly those in the medical and educational fields, are well-informed about the condition, so as to facilitate early identification and intervention, which are key in managing the symptoms and improving the outcomes for children with Selective Mutism.

Limitation

- This study is a cross-sectional study; therefore, it was subject to participation bias as they may have congenital selective mutism or by some accident.
- Students may give socially desirable answers in order to make themselves look good or to avoid negative judgment, which can affect the validity of the result.

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Conflict of interest:

The authors of this research article declare no potential conflicts of interest.

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