# Tourette Syndrome and Social Problems

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Abstract: The aim of this paper is to explore the social impact of Tourette Syndrome (TS) and how it leads to social problems. The research categorizes influencing factors based on the definition of social interactions to comprehend both internal and external factors related to TS. The study's findings emphasize the need for further research on the social impact of TS to attain a more comprehensive understanding of how the disorder affects social functioning. The research indicates societal perceptions of TS play an essential role in shaping the experiences of individuals affected by it. Moreover, the patients' self-perception also exerts some influence. Understanding these factors can raise public awareness and empathy, creating a more supportive environment for patients affected. The study concludes that increasing research on the social aspects of TS is vital for enhancing public understanding and providing more effective support to the sufferers.

**Keywords:** Tourette Syndrome, social problems, behavior and psychology

## 1. Introduction

Tourette's has always been a rare disorder in the public consciousness. The early report states that the prevalence among school-age children is about 0.05% [1]. However, the prevalence of Tourette syndrome in the actual population is underestimated by at least a factor of 10 in known clinical case series [2]. According to research done by Scharf, Jeremiah M., and his colleagues, the prevalence of TS in children is estimated to range from 0.3% to 0.9%, with indications pointing towards the higher end of the estimate [1]. As the current prevalence is much higher than previous data, it can infer that insufficient attention was paid to Tourette syndrome in recent years. Unfortunately, in addition to the underrated prevalence rate, Tourette Syndrome also brings patients with social problems. Considering the importance of consequences lead by Tourette syndrome, more public attention is expected to be given to Tourette Syndrome and its sufferers.

Tourette syndrome (TS) is defined as a childhood-onset neuropsychiatric disorder characterized by multiple motor and vocal tics lasting at least a year in duration [3]. Individuals with Tourette Syndrome may exhibit repetitive eye blinking, shoulder shrugging, or spontaneous vocalizations of unusual sounds or offensive words [3]. It may be caused by the adverse environment of the mother during pregnancy, severe psychosocial trauma to the child, recurring daily stress, post-infectious autoimmune reactions to recurrent streptococcal infections and substance abuse, etc. [4]. Tourette's symptoms are characterized by varying degrees of convulsions--tics. In addition to tics, children with TS are usually found to be suffering from several complications such as Attention-deficit / hyperactivity disorder, obsessive-compulsive disorder, autism spectrum disorder, learning disabilities,

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Sleep disorders, Depression, Anxiety disorders [5], and so forth.

With the symptoms mentioned above, TS can have a profound effect on both the behavior and psychology of the patient. For example, depressive symptoms and obsessionality are higher in the TS patient compared with the unaffected group, while two studies of depression provide strong evidence for this. Rosenberg, using the Child Behaviour Checklist reported that a third of nearly 200 children with TS had depressive symptomatology [6]. Another psychologist, Spencer, reported a higher prevalence of depression in the children with Tourette Syndrome (29%) and children with tics (33%) than in the children unaffected (3%) [7]. It is assumed that higher rates of depression and the symptoms can make it difficult for people with TS to socialize. Suggested by research, individuals with Tourette Syndrome are facing challenges related to behavior in everyday social situations. Apart from the well-known symptoms of coprolalia and copropraxia associated with the disorder, some individuals also exhibit socially inappropriate behavior. More researches have also presented that children with TS have an increased risk of poor partner relationships compared to clinical controls, [8] which can be regarded as evidence that children with Tourette Syndrome are likely to have social problem or social disability.

So how exactly is Tourette Syndrome affecting social ability of children? Unfortunately, most of the existing studies mainly focus on the treatment of Tourette syndrome as well as the causes and symptoms of Tourette syndrome (such as tics), but few studies specifically analyze and summarize how Tourette syndrome leads to social difficulties. In order to fill the gap, this article specifically analyzes the causes of social difficulties caused by Tourette's syndrome from two aspects: the patients themselves (they may refuse to socialize due to inferiority) and the external environment (people around them may discriminate against Tourette's patients and do not want to socialize with them). The reason why the influencing factors that affect the social ability of people with TS are divided into the patient and the external environment is that this paper defines social interaction as the communication between one subject and another subject in a certain environment. Therefore, it is reasonable that both subjects involved in socializing should be responsible for the problem of social difficulties. This paper aims to discuss how social environment and self-awareness lead to social problems of TS sufferers.

# 2. The typical symptom: tics

Tics, the one of the most typical and common symptoms of Tourette Syndrome, are considered as the main cause of social problems. Tics are involuntary, brief, rapid and non-rhythmic muscle contractions occurring on a background of normal activity and causing purposeless and stereotyped motor actions (motor tics). Contractions of respiratory, laryngeal, oral and nasal musculature may produce sounds (vocal tics) [9].

Psychiatrists William and Laura have conducted a survey of 210 TS sufferers and their parents, asking them to rate the impact of Tourette's symptoms on social relationships and levels of personal and social functioning. Showing by the results, more than 40% of respondents reported that they have problems in dating, as well as making and keeping friends [9]. In addition, in a clinical cohort of 16–54-year-olds with TS, 29% of patients had family relationship problems, 27% had difficulty making friends, 20% had a social life, and 15% had self-awareness [10].

The following paragraphs analyze the social impact of tics due to Tourette syndrome from two aspects: self-awareness and externality.

## 3. How TS leads to social problems

### 3.1. Self-awareness

Self-awareness refers to the awareness of one's personality and individuality [11]. It shows and

determines how an individual views and understands their own personalities, feelings, motives, and desires [12]. Based on the definition, this paper comprehends self-awareness as how does the patient accept the fact that he has Tourette Syndrome and whether his attitude towards his symptoms is positive or negative. Since each person's self-awareness varries, the emotions they generate and the behaviors they emit will be different as well. Even though, in general, the self-awareness of Tourette's patients is expected to be similar and consistent.

One study found that 29% of people with TS reported difficulties in the social sphere of quality of life, primarily difficulties in socializing due to self-awareness [10]. Since tics are uncontrollable convulsions, patients (especially between 6-16) with TS are likely to feel embarrassed and awkward when tics happen in public. They thus will develop negative emotions and attitudes towards their behaviors. Consequently, patients often suffer from low mood, depression, substance abuse, conduct disorders in children, personality disorders in adults and other psychological problems which may lead to low self-esteem and negative self-awareness. After developing negative self-awareness, they may feel worse about themselves- deny their own worth or even think their own existences is a mistake, when the tics happen again. In the long run, this can result in a vicious cycle.

With low self-esteem, people with TS often exhibit insecure attachment, relationship anxiety, and relationship avoidance. A recent study based on parents of young adults with Tourette Syndrome found that teenagers with TS are at increased risk for insecure peer attachment [13]. Patients are unwilling to take the initiative to build relationships with peers out of fearing ridicule and disgust during tics. Hence, in order to prevent possible psychological injury, patients often choose to avoid the controllable establishment of relationships rather than suppressing uncontrollable tics. Meanwhile, people with Tourette Syndrome also have problems keeping relationships with friends. Tics and severe obsessive-compulsive disorder force sufferers to strive for perfection, which is also reflected in the maintenance of friendships. Patients tend to have extremely high requirements and double checks on their peers and their own behavior. Moreover, obsessive-compulsive disorder in academic or work life can limit academic and work progress, which leads to a lack of educational and social experience [14]. Thus, incurs certain negative effects, including poor frustration tolerance, impulsivity, and anger. If one friend has done something against the patient wills, Patients are more likely than normal to be dissatisfied with their friends. Then, in the case of dissatisfaction with their friends, they will gradually develop more disgust towards their friends and are unwilling to maintain friendship or even take the initiative to end the relationship with their friends.

As another aspect of social interaction, the relationship between patients and their families is equally important and worthy of study. Healthy and stable family relationships can also be effective in helping patients have stable and positive emotions. Unfortunately, young patients tend to have arguments with their family members because of their Tourette syndrome symptoms. According to a controlled clinical study, compared to the healthy control group, young people with TS participate less in family and social activities, communicate less with adults in their families, feel less secure about their families, and witness more family arguments [15]. The conflict between the patient and the family may even become more intense over time in young adulthood. In addition to young patients, adult patients have similar problems. In one study of adults with TS, 29% of participants felt that their condition was not supported by their families [10]. Due to their symptoms and complications, they can be extremely stressful for family members. Raising a child with TS is thus several times more difficult than raising a normal child. As they spend more time with patients and endure more and more of their symptoms, family members will inevitably become dissatisfied with the patient. It may take the form of scolding the patient or a casual display of disgust. Although these actions are only instantaneous or even minor, they can be magnified in the mind of patients who are already extremely sensitive and cause them pain. Even when family members perceive their behavior and apologize for it, the effect is minimal. In addition to this, irritable and explosive characteristics aroused by Tourette

Syndrome make it easier for sufferers to argue with family members. Therefore, difficulties with family can also show how people with Tourette's are socially challenged.

### 3.2. Externality

Externality is one of the factors that cause social difficulties from the external environment. Externality includes attitude of people around the patient, the school, workplace and society towards Tourette Syndrome sufferers.

Evidence suggests that teenagers with TS receive less positive rate from their peers [16] and are less socially acceptable [17] than the healthy control group. Moreover, peer victimization, such as bullying and teasing, occurs at higher rates in youth with TS than controls [18]. According to the research done by Christine and Cathy, most of the TS patients suffer from discrimination [19]. Forms of discrimination include verbal aggression, physical aggression, isolation, differential treatment, bullying and so forth. Figures show that Tourette sufferers at work are treated in a rude or discriminatory manner, young patients at school are asked to leave the class or even school, most patients are warned to leave public space [20]. Out of discrimination, the public is not willing to socialize with people suffering from Tourette Syndrome which is considered as one of the direct causes of social problems.

Based on this situation, this paper classifies the reasons of discrimination into two essential points: the rarity of Tourette syndrome and public's negative feedback towards abnormally behaviored people. The following paragraphs will discuss them in detail.

# 3.2.1. lack of public awareness

As previously mentioned, the estimated TS prevalence in children is from 0.3% to 0.9%. [21] The low prevalence of Tourette disorder compared to other psychiatric disorders has contributed to a lack of public understanding of Tourette syndrome. In the absence of public awareness of the symptoms of Tourette syndrome, public organizations such as hospitals and schools are still insufficient to publicize Tourette syndrome. Because of the low prevalence, people often do not understand the cause of the disease, the symptoms, and the impact of symptoms on patients. In this way, the general public may not be able to recognize the Tourette patients around them and then misunderstand them. Thus, when tics appear, people with TIC syndrome may face accusations of 'doing it on purpose'.[22] Especially when the tics occur in public, the patient may be barred from appearing on the grounds of intentional disturbance. In addition, people with Tourette syndrome, no matter young or middle-aged, may be perceived by classmates or colleagues as deliberately seeking attention or sensationalism, when symptoms occur. As a result, they may become resentful or even hostile to the Tourette sufferers and refuse to form friendships with the them because of this misunderstanding.

#### **3.2.2.** malice

As Richard reports that people without disabilities will not fully embrace them until subtle barriers are removed [20]. Although the TS patients have already explained his/her symptoms, the person who gives malice will hardly curb their behavior. This often happens in schools and workplace in particular (Individuals with mental disorders often identify employment discrimination as one of the most common forms of stigma they experience) [21, 22]. Out of mental immaturity and lack of education, even after learning that their classmates or colleagues with Tourette syndrome has uncontrolled convulsions, people will still discriminate against him/her in a joking or sadistic manner--they may imitate the patient's behavior, give them offensive nicknames, deliberately provoke the patient, or isolate the patient in a variety of ways. Previous research has demonstrated that individuals with serious mental disorders continue to experience disproportionately high unemployment rates due to

discrimination [23]. For example, large-scale population surveys consistently estimate that the unemployment rate for people with mental disorders is three to five times higher than that for people without mental disorders. 61% of working-age adults with mental health disability are not involved in the labor force, comparing to merely 20 percent of the general population [24].

# 4. Improvements to be made

In addition to exploring the relationship between Tourette syndrome and social difficulties, this article also aims to raise awareness of TS and the patients in order to help people with TS live a better life in the society. In order to achieve this, more social agencies are expected to pay efforts in advertising TS.

It is worth mentioning that the entertainment industry, especially the film industry, has brought awareness to Tourette syndrome in recent years and has led many people to understand this rare and special syndrome. For instance, the American film *The Front Of The Class* and the Indian film *Hiccup Teacher* are inspirational films about people with Tourette syndrome and have succeeded in gaining great exposure and critical acclaim. However, there is still not enough attention compared to what Tourette's patients need.

The education industry, and schools in particular, should take responsibility for teaching and explaining Tourette syndrome in the classroom. To help children recognize Tourette syndrome earlier and teach them how to deal with Tourette syndrome children. In this way, discrimination and misunderstanding of Tourette's patients can be greatly reduced. What's more, students will be more compassionate to people with Tourette's and give them more care. Meanwhile, Schools should also give people with Tourette's more attention, instead of resistance. Help them to think more positively about their condition, and lead them to get along with their classmates more actively.

Additionaly, as for those patient who have the ability to work and are willing to work, companies should not refuse to hire them or dismiss them because of their symptoms. No one with Tourette's should be treated unfairly or discriminated against in the workplace. Other social agencies such as charities may hold Touret-themed fundraiser or shows to raise awareness of Tourette syndrome and provide patients with substantial help.

It is hoped that everyone can learn more about Tourette Syndrome and give positive responses. With all people work together, there will be no doubt that the living standard of Tourette sufferers can be greatly improved.

### 5. Conclusion

This paper discusses how patient with Tourette Syndrome develop social problems in their daily lives. According to the above analysis, about 40 percent of TS sufferers will have difficulties in social interaction. While thinking about the causes of social difficulties, I divide them into two parts: self-awareness and external circumstances. After a detailed analysis of these two aspects, it has been found that 29 percent of people feel inferior because of negative self-awareness, so they are not willing to initiate a relationship. Meanwhile, some of the Tourette Syndrome's complications, such as obsessive-compulsive disorder, also make it difficult for patients to actively maintain a relationship. In addition to self-awareness, the external environment is another main cause of social difficulties. Due to the rarity of TS, the public is less aware of it, making it hard to identify Tourette syndrome patients around. As a result, the public often has negative attitude towards people with Tourette syndrome, and it will be imposed on the patient in the form of verbal and behavioral bullying, leading to social problems of TS sufferers.

However, limitations of this research still exist. To begin with, it is worth noting that the results of sample surveys may offer a limited representation of the overall situation among patients with TS. As

a result, the data mentioned in this paper might not be entirely reflective of the true picture. It is possible that the actual data on social difficulties and depression rates of patients could exhibit some variations compared to the figures listed in this article. In addition, it is difficult to ascertain whether the factor is of internal or external origin. Different interpretations of external and internal factors may lead to result biases. Besides, the basis for this classification lies in the definition of sociability, yet there are other divisions that can also shed light on social difficulties Meanwhile, the study did not factor in other potential influences such as genetics and pre-existing personality traits.

In order to help people with Tourette syndrome live a better life in this society, the following measures are encouraged to be done. First, the entertainment and media industries should help promote Tourette syndrome and raise public awareness. Secondly, schools should give Tourette's patients special care, such as psychological counseling, and should not expel them because of their illness. At the same time, schools need to offer Tourette Syndrom-themed courses to help children better understand TS and better get along with people with TS. Finally, all companies and organizations should not discriminate or fire employees on the basis of TS.

However, the researches about Tourette Syndrome are still not comprehensive. It is recommended that future studies place greater emphasis on investigating the social impact of TS, thereby generating more data that can be utilized to analyze how Tourette syndrome could influence social functioning. A study is needed to differentiate and delineate internal and external factors. To facilitate more effective and precise discussions on factors affecting social ability. Thirdly, further research based on diverse classification methods is also needed to gain a more comprehensive understanding of the social impact of Tourette syndrome. By doing so, the general public can gain a deeper understanding of Tourette syndrome, which, in turn, can provide better support and assistance to individuals living with this disorder.

#### References

- [1] Scharf, J. M., Miller, L. L., Gauvin, C. A., Alabiso, J., Mathews, C. A., & Den-Shlomo, Y. (2014). Population prevalence of Tourette Syndrome: A systematic review and meta-analysis. Movement Disorders, 30(2), 221–228. https://doi.org/10.1002/mds.26089
- [2] Kadesjo B, Gillberg C. Tourette's disorder: epidemiology and comorbidity in primary school children. J Am Acad Child Adolesc Psychiatry 2000; 39:548-555
- [3] Bloch, M. H., & Deckman, J. F. (2009). Clinical course of Tourette syndrome. Journal of Psychosomatic Research, 67(6), 497–501. https://doi.org/10.1016/j.jpsychores.2009.09.002
- [4] Leckman, J. F. (2002). Tourette's syndrome. The Lancet, 360(9345), 1577–1586. https://doi.org/10.1016/s0140-6736(02)11526-1
- [5] Centers for Disease Control and Prevention. (2023, May 31). What is Tourette syndrome?. Centers for Disease Control and Prevention. https://www.cdc.gov/ncbddd/tourette/facts.html
- [6] Rosenberg LA, Brown J, Singer HS (1995) Behavioral problems and severity of tics. Journal of Clinical Psychology 51:760–767
- [7] Spencer T, Biederman J, Harding M, Wilens T, Faraone S (1995) The relationship between tic disorders and Tourette's syndrome Revisited. Journal of the American Academy of Child and Adolescent Psychiatry 34:1133–1139
- [8] Channon, Shelley PhD\*; Crawford, Sarah PhD\*; Vakili, Kian BA\*; Robertson, Mary M. MD†. Real-life-type Problem Solving in Tourette Syndrome. Cognitive and Behavioral Neurology 16(1):p 3-15, March 2003.
- [9] Champion, L. M., Fulton, W. A., & Damp; Shady, G. A. (1988). Tourette syndrome and social functioning in a Canadian population. Neuroscience & amp; amp; Biobehavioral Reviews, 12(3–4), 255–257. https://doi.org/10.1016/s0149-7634(88)80054-x
- [10] Elstner K, Selai CE, Trimble MR, Robertson MM. Quality of life (QoL) of patients with Gilles de la Tourette's syndrome. Acta Psychiatr Scand (2001) 103(1):52–9. doi:10.1034/j.1600-0447.2001.00147.x
- [11] Merriam-Webster. (n.d.-a). Self-awareness definition & meaning. Merriam-Webster. https://www.merriam-webster.com/dictionary/self-awareness
- [12] Wikimedia Foundation. (2023, June 28). Self-awareness. Wikipedia. https://en.wikipedia.org/wiki/Self-awareness
- [13] O'Hare D, Helmes E, Eapen V, Grove R, McBain K, Reece J. The impact of tic severity, comorbidity and peer attachment on quality of life outcomes and functioning in Tourette's syndrome: parental perspectives. Child

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- Psychiatry Hum Dev (2015) 6:1-11. doi:10.1007/s10578-015-0590-7
- [14] Eapen, V., Cavanna, A. E., & Eaper, Robertson, M. M. (2016). Comorbidities, social impact, and quality of life in tourette syndrome. Frontiers in Psychiatry, 7. https://doi.org/10.3389/fpsyt.2016.00097
- [15] Eddy, C. M., Rizzo, R., Gulisano, M., Agodi, A., Barchitta, M., Calì, P., Robertson, M. M., & Damp; Cavanna, A. E. (2010). Quality of life in young people with Tourette Syndrome: A controlled study. Journal of Neurology, 258(2), 291–301. https://doi.org/10.1007/s00415-010-5754-6
- [16] Friedrich S, Morgan SB, Devine C (1996) Children's attitudes and behavioral intentions toward a peer with Tourette syndrome. J Pediatr Psychol 21:307–319
- [17] Boudjouk PJ, Woods DW, Miltenberger RG, Long ES (2000) Negative peer evaluations in adolescents: effects of tic disorders and trichotillomania. Child Fam Behav Ther 22:17–28
- [18] Conelea, C. A., Woods, D. W., Zinner, S. H., Budman, C., Murphy, T., Scahill, L. D., Compton, S. N., & D. (2010). Exploring the impact of chronic tic disorders on youth: Results from the Tourette Syndrome Impact Survey. Child Psychiatry & Child Psychiatry & Development, 42(2), 219–242. https://doi.org/10.1007/s10578-010-0211-4
- [19] Davis, K. K., Davis, J. S., & Dowler, L. (2004). In motion, out of place: The public space(s) of Tourette syndrome. Social Science & Dowler, Medicine, 59(1), 103–112. https://doi.org/10.1016/j.socscimed.2003.10.008
- [20] F. Antonak, R., & Eivneh, H. (2000). Measurement of attitudes towards persons with disabilities. Disability and Rehabilitation, 22(5), 211–224. https://doi.org/10.1080/096382800296782
- [21] Gaebel W, Bauman AE, Za" ske H. Intervening in a multilevel network: progress of the German Open the Doors projects. World Psychiatry 2005; 4 (Suppl 1): 16–20.
- [22] Roeloffs CC, Sherbourne J, Unu" u"tzer A, et al. Stigma and depression among primary care patients. Gen Hosp Psychiatry 2003; 25:311–315.
- [23] Morgan G. We want to be able to work. Mental Health Today October 2005; 32–34.
- [24] Cook JA, Leff HS, Blyler CR, et al. Results of a multisite randomized trial of supported employment interventions for individuals with severe mental illness. Arch Gen Psychiatry 2005; 62:505–512.