

Free or not free? – this is the question.

Control over tics and free will in patients with Gilles de la Tourette syndrome

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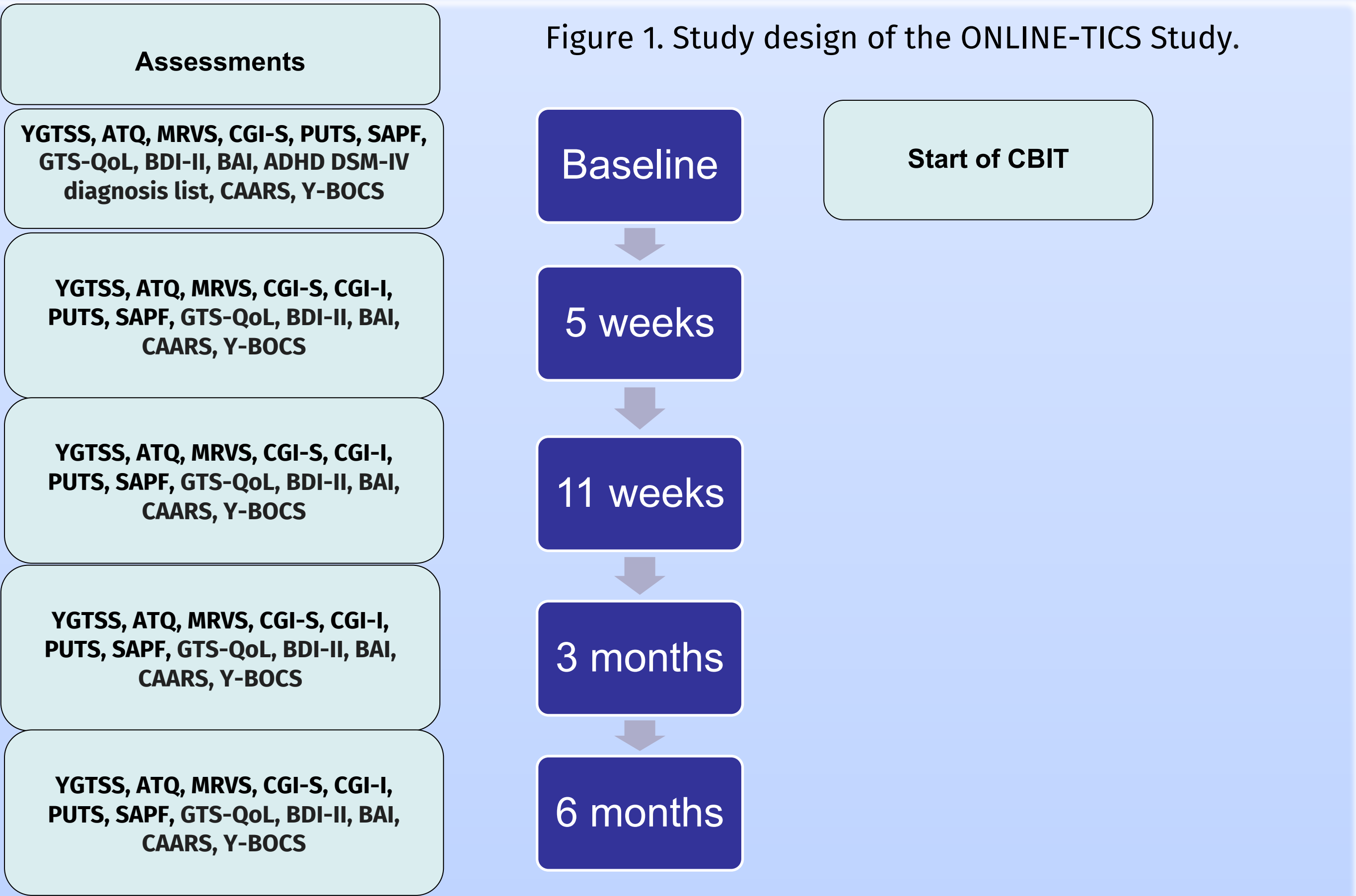
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Background and aim

- Although, by definition, tics are characterized by **involuntariness**, one of the most typical features is the presence of some degree of **control** and **suppressibility**. However, both attributes are highly variable.
- In our study, we wanted to investigate whether patients with Gilles de la Tourette syndrome (GTS) change their basic convictions regarding the **freedom of their own will** and **control** over their tics after a **comprehensive behavioural intervention for tics** (CBIT). As we are still in the process of data collection, we are currently presenting the baseline data on a descriptive level.

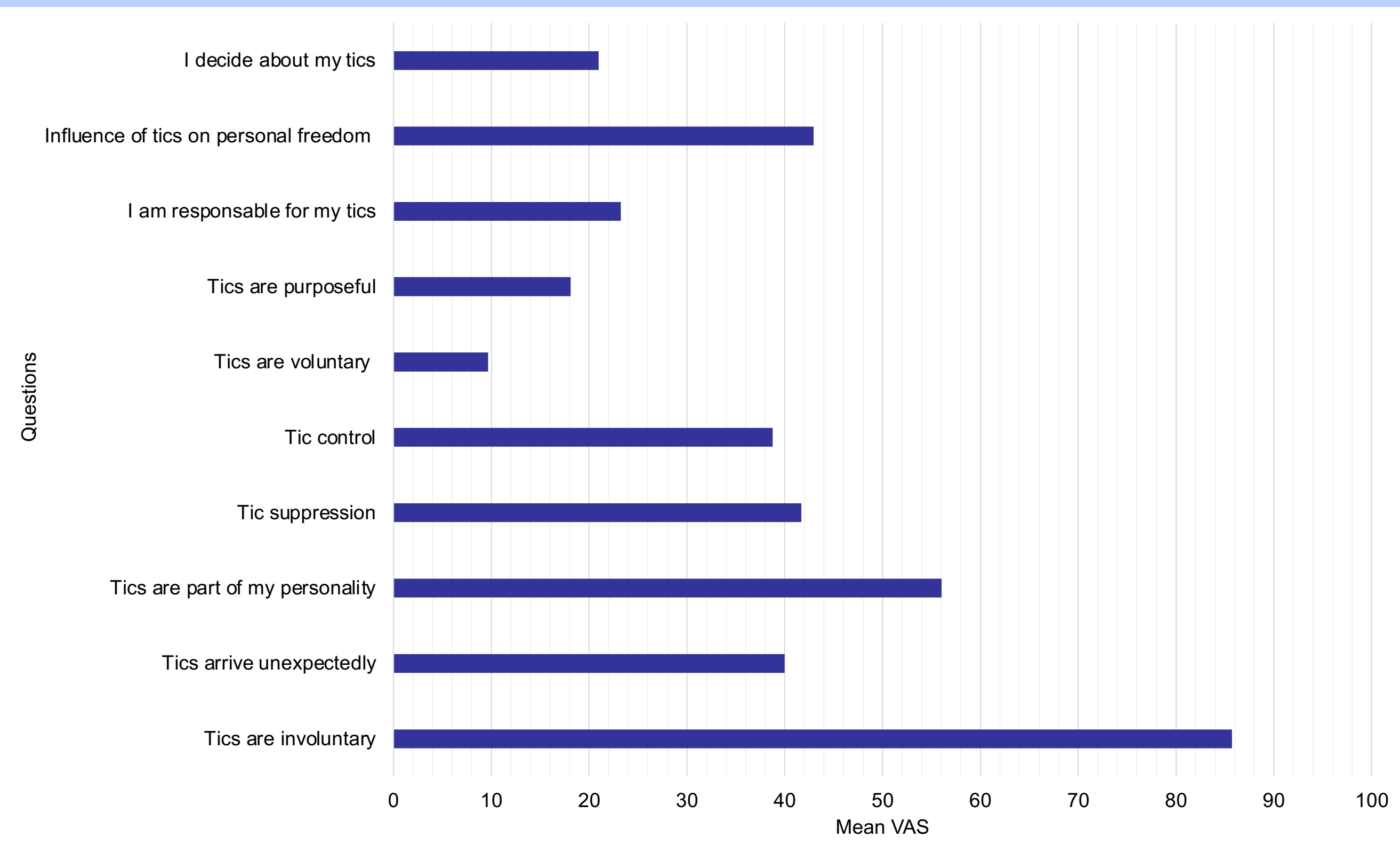
Methods

- Our sample consisted of **65** adults with GTS whose data were analyzed at baseline as a part of the ONLINE-TICS trial (Haas et al. 2022; Figure 1).
- We used the **Symptomatology And Perceived Free Will Rating Scale** that was developed, inter alia, for patients with GTS (SAPF, van der Salm, 2017) which was translated into German.
- The items of this questionnaire measure general beliefs about the existence of the **free will**, **control** over tics, the **ego-syntonic** perception of tics, **suppressibility**, interpretation of tics as a disease, feeling of **responsibility** for tics, influence of tics on the personal **freedom** and the ability to perform voluntary actions that are not compatible with tics.
- Some elements were rated on a dichotomous scale (yes/no) and agreement with certain statements were measured using a visual analogue scale (VAS) ranging from 1-100 with higher numbers presenting a higher degree of approval.

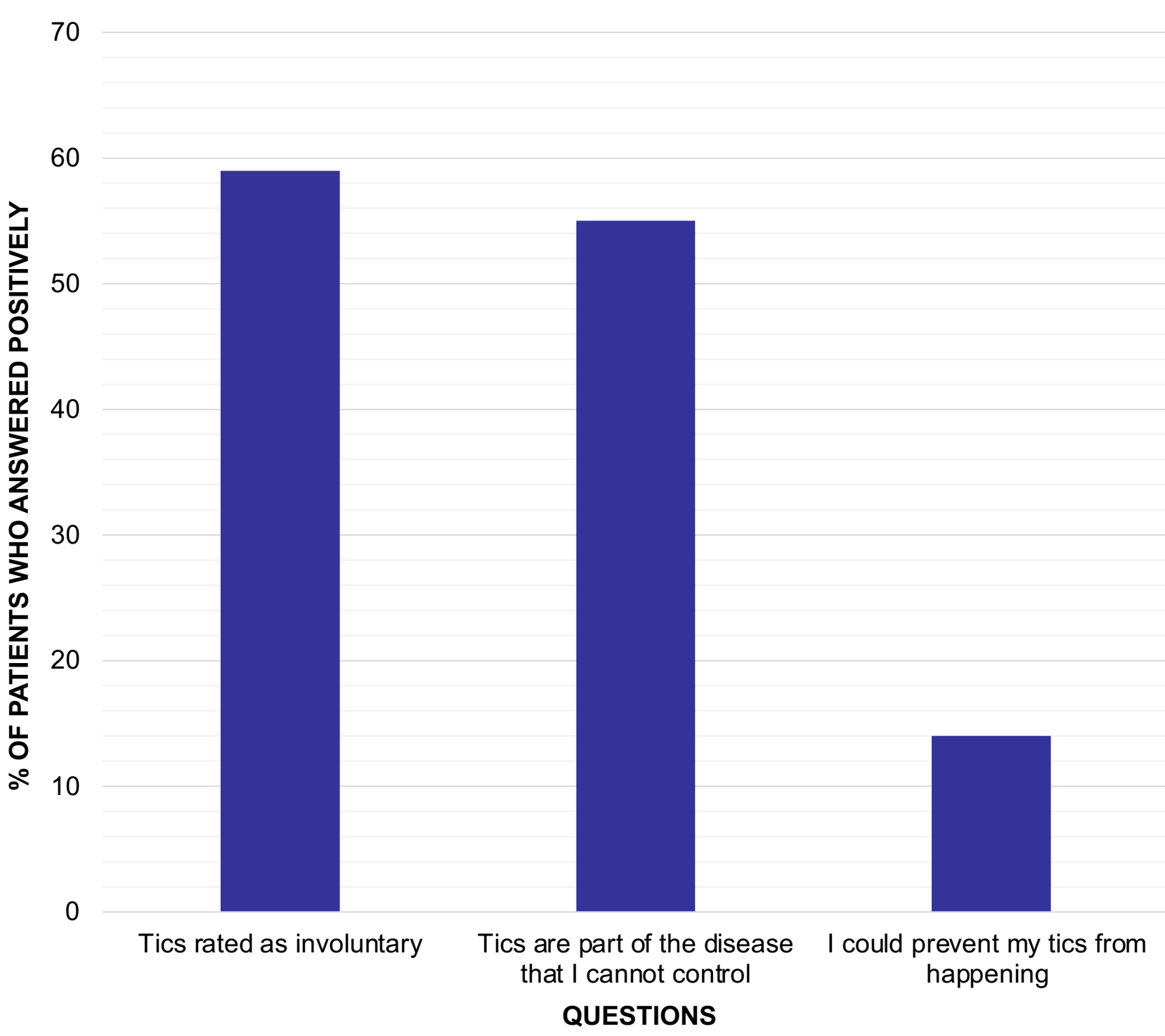


YGTS – the Yale Global Tic Severity Scale, ATQ – the Adult Tic Questionnaire, MRVS – the Modified Rush Video-Based Tic Rating Scale, CGI-I – Clinical Global Impression Severity Score, CGI-S – Clinical Global Impression Improvement Score, SAPF – the Symptomatology And Perceived Free Will Rating Scale, ADHD – attention deficit hyperactivity disorder, GTS-QoL – Gilles de la Tourette Quality of Life Scale, BDI – Beck Depression Inventory, BAI – Beck Anxiety Inventory, CAARS – Conner's Adult ADHD Rating Scale, Y-BOCS – Yale Brown Obsessive-Compulsive Scale

Results: Baseline SAPF VAS Scale



Results: Baseline SAPF, dichotomous variables



VAS – visual analogue scale, SAPF – Symptomatology And Perceived Free Will Rating Scale

Conclusions

- Our findings largely stay in line with the study by van der Salm et al. (2017) in which tics were found to be largely involuntary, according to patients' perception
- If convictions of patients can be influenced by CBIT, this psychological intervention might be a powerful tool that could decrease the experience of shame in GTS patients which could potentially increase their functional levels and decrease comorbid depressive symptoms.
- Additionally, these results suggest that previously described features such as suppressibility is highly variable.