

Occupational Impact of Tardive Dyskinesia: a Cross-Sectional, International Survey Assessing the Perceptions and Experiences of Patients With TD and Physicians Who Treat TD

Rinat Ribalov,¹ Ayelet Yaari,¹ Aviva Peyser Levin,¹ Amy Yang,² Dabha Horchi,³ Erwan Berjonneau,³ Perrine Le Calvé,³ Marc Tian,² Shoshana Reshef,⁴ Suzanne Reed³

¹Teva Pharmaceutical Industries Ltd., Tel Aviv, Israel; ²Teva Branded Pharmaceutical Products R&D, Inc., West Chester, PA, United States; ³Cerner Enviza/Oracle, Paris, France; ⁴Teva Branded Pharmaceutical Products R&D, Inc., Parsippany, NJ, United States

Key Question: How does tardive dyskinesia affect patients' occupational functionality?

Key Finding: Both patients and physicians reported substantial negative effects of tardive dyskinesia on patients' ability to obtain and maintain employment as well as on job performance

Introduction

- Tardive dyskinesia (TD) is an involuntary, hyperkinetic movement disorder that markedly affects involved patients and carers^{1,2}
- TD-related abnormal, involuntary movements can impair fine motor skills, making employment challenging³
- TD may be caused by exposure to antipsychotic medications (APs) used to treat schizophrenia (SCZ), bipolar disorder (BPD), and major depressive disorder (MDD)³

Objective

- To assess patient and physician attitudes towards the effects of TD on occupational functionality

Results

- Overall, 435 patients (Table 1) and 340 physicians (Table 2) were included in the study
 - Neurologists in the study reported managing a mean (SD) of 35.4 (55.8) patients with TD in the 2 years prior to the study
 - Psychiatrists in the study reported managing a mean (SD) of 27.5 (48.6) patients treated with APs who experienced TD in the 2 years prior to the study

Table 1. Patient Characteristics

	Patient population N=435
Country, n (%)	
Australia	100 (23.0)
Brazil	85 (19.5)
China	150 (34.5)
South Korea	100 (23.0)
Age, years, mean (SD)	42.4 (11.7)
Female, n (%)	226 (52.0)
Underlying psychiatric conditions, n (%)	
SCZ/schizoaffective disorder	233 (53.6)
BPD	205 (47.1)
MDD	171 (39.3)
Time since first TD symptoms, years, mean (SD)	4.3 (4.0)
Time since diagnosis of TD, years, mean (SD)	3.4 (3.5)
Time between first symptoms and diagnosis, months, mean (SD)	9.6 (15.6)

Methods

- Patients were adults (aged ≥18 years) with self-reported physician diagnoses of TD as well as SCZ, schizoaffective disorder, BPD, or MDD, plus self-reported experience of extra, irregular movements
- Patients were recruited from Australia, Brazil, China, and South Korea via physician referral, patient advocacy groups, and social media, and invited to complete an online questionnaire after providing informed consent (27 June–17 October 2022)
- Certified physicians (neurologists and psychiatrists) from Australia, Brazil, China, Israel, and South Korea who were members of online panels, have practiced for ≥3 years with ≥60% of their time in direct patient care, and have been responsible for treating ≥3 patients with TD in the prior 2 years were invited to complete an online questionnaire (27 June–27 July 2022)
- Physicians' and patients' data and questionnaires were not linked
- Participants completed a 20-minute anonymous online questionnaire; results were analyzed descriptively
 - Questionnaires were reviewed and approved by the Cerner Enviza Institutional Review Board

Table 2. Physician Characteristics

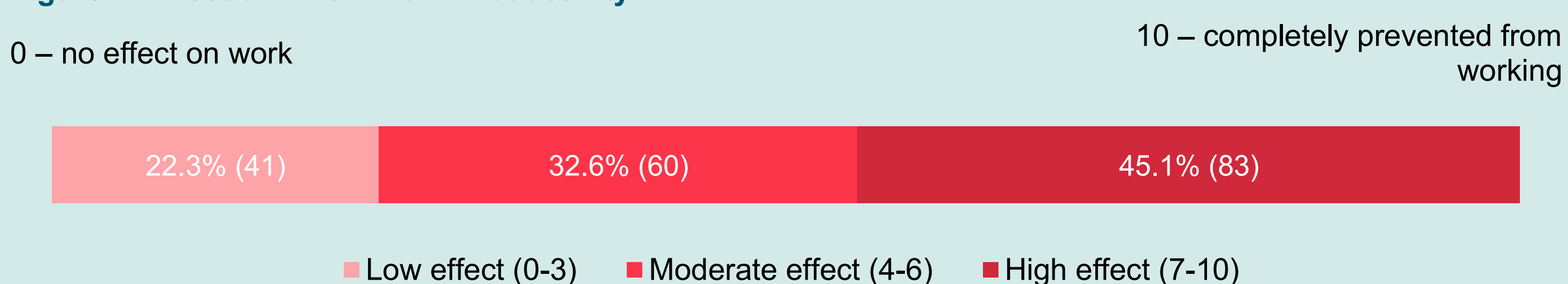
	Physician population N=340
Country, n (%)	
Australia	46 (13.5)
Brazil	102 (30.0)
China	101 (29.7)
Israel	31 (9.1)
South Korea	60 (17.6)
Age, years, mean (SD)	45.0 (8.6)
Female, n (%)	127 (37.4)
Primary medical specialty, n (%)	
Neurologist	131 (38.5)
Psychiatrist	209 (61.5)
Clinical, post-qualifying experience, years, mean (SD)	15.6 (7.9)
Time spent in direct patient care, %, mean (SD)	86.1 (10.7)
Time spent in clinical practice, %, mean	
Hospital – outpatient (public or private)	58.9
Private office	28.8
Clinic (community or private)	10.1
Other	2.2

Key Results

Effect of TD on Work Productivity

- Less than half (43%, n=187 of 435) of patients reported current employment
 - Mean (SD) hours worked over the prior 7 days: 35.8 (15.7)
 - Mean (SD) hours missed from work over the prior 7 days because of problems associated with TD: 6.3 (9.3)
- On a scale of work productivity ranked from 0 (no effect on work) to 10 (completely prevented from working), patients stated TD had a mean (SD) effect of 5.4 (2.4) (Figure 1)
 - In total, 45.1% of patients reported that TD highly affected productivity

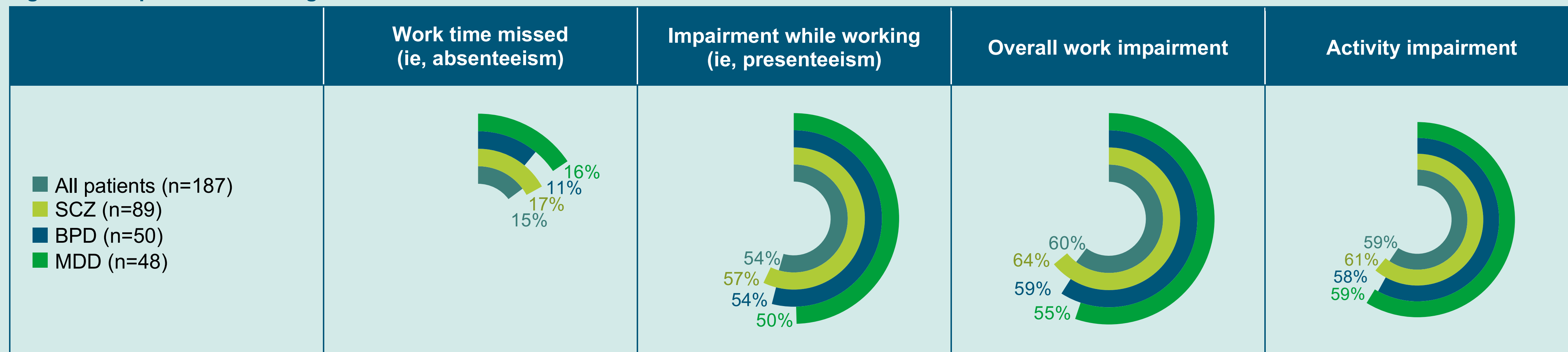
Figure 1. Effect of TD on Work Productivity



Work and Activity Impairment Among Patients With TD

- Questions and scoring were based on an adapted version of the Work Productivity and Activity Impairment Questionnaire (WPAI)
- Among working patients, 15% reported that TD caused missed work time, 54% reported impairment while working, 60% reported overall work impairment, and 59% reported activity impairment (Figure 2)
 - Rates for patients with SCZ differed minimally from those for all patients and those with other underlying psychiatric conditions

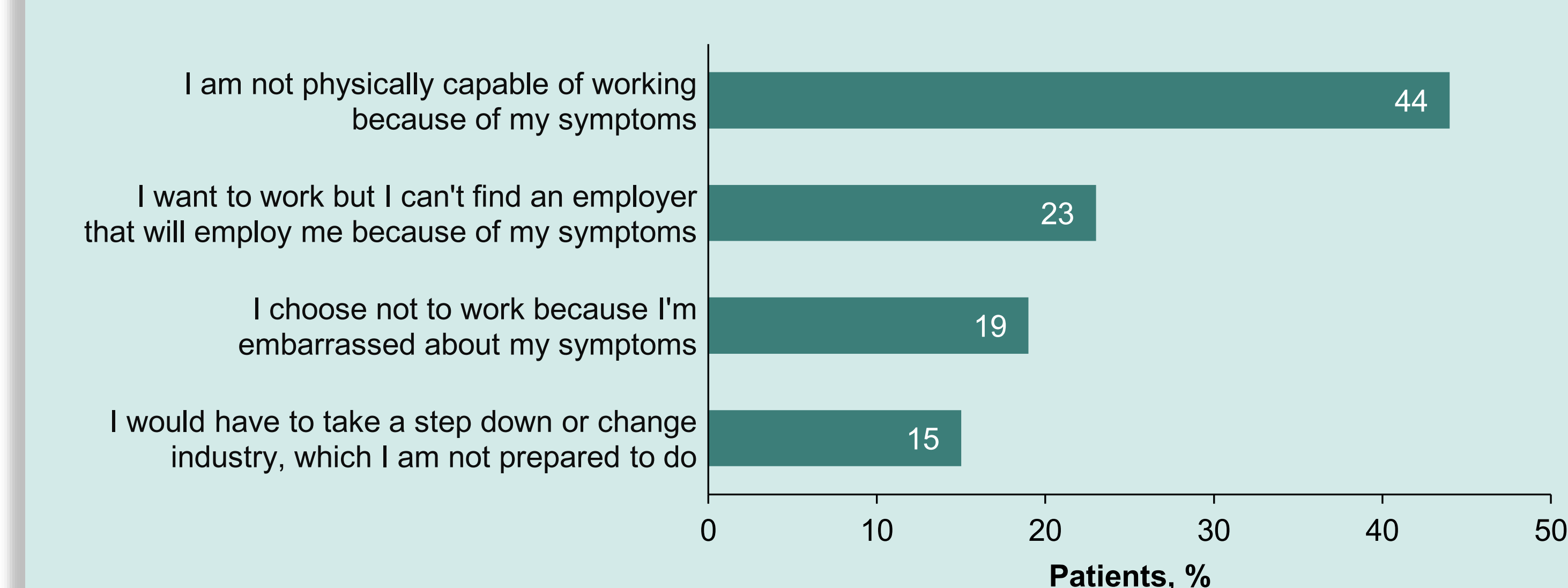
Figure 2. Adapted WPAI Among Patients With TD



Reasons for Not Working Among Patients With TD

- Overall, 248 of 435 patients (57%) reported that they were not currently working
- Of those, 50% said they were not working due to TD symptoms (Figure 3)
 - The most common reason given was that patients felt physically incapable of working due to TD symptoms (Figure 3)

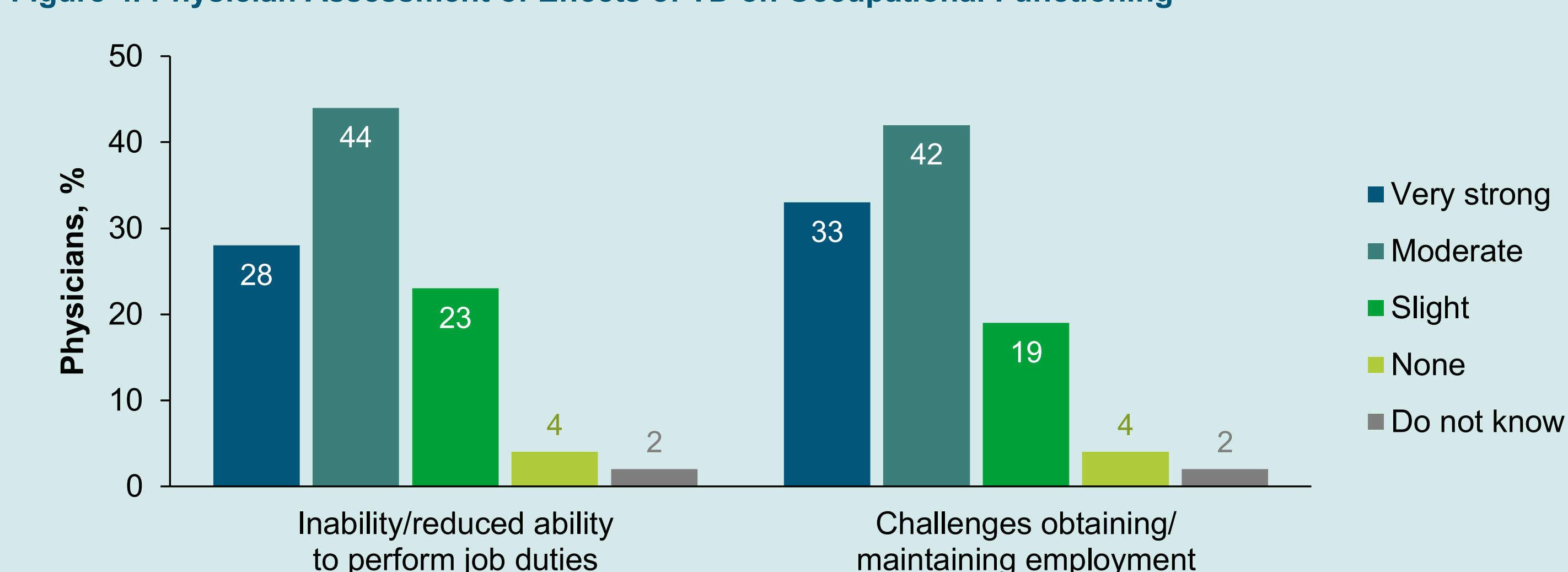
Figure 3. Reasons for Not Working



Physician Assessment of Effects of TD on Occupational Functioning

- Of 340 physicians, 61% reported assessing the effects of TD on patients' occupational functioning "always or almost always" (9–10 times out of 10) or "often" (6–8 times out of 10), 31% reported assessing these effects "sometimes," and 8% reported "never/rarely" (ie, 3–5 times/1–2 times out of 10, respectively)
- Overall, 72% and 75% of physicians estimated that TD had a moderate/very strong effect on patients' inability/reduced ability to perform job duties and challenges obtaining/maintaining employment, respectively (Figure 4)

Figure 4. Physician Assessment of Effects of TD on Occupational Functioning



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Disclosures
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Abbreviations
AP = antipsychotic, BPD = bipolar disorder, MDD, major depressive disorder, SCZ = schizophrenia, TD = tardive dyskinesia, WPAI = Work Productivity and Activity Impairment Questionnaire

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Conclusions

- In these surveys, patients and physicians agreed that TD considerably worsens occupational opportunities and functionality
- Patients with TD reported substantial absenteeism and work impairment due to TD
- More than half of patients reported not currently working due to TD, and the most common specific reason given was that patients felt physically incapable of working due to TD symptoms