Contents

Preface x
Acknowledgments xii
About the Editors xiii
About the Contributors xiv

SECTION I: Neuropsychiatric Conditions Affecting Children

Chapter 1: Developments in Neuropsychiatric Treatment: New Challenges and Old Problems 2
Paul C. McCabe and Steven R. Shaw
Introduction 2
Linking Neurotransmitters to Behavior 3
Increasing Specificity of Medications 4
Medication Side Effects 4
(De-)Emphasis on Talk Therapies 5
Future Directions 6

Chapter 2: Neurochemical Bases of Tourette Syndrome and Implications for Educators 8
Jason Collins and Paul C. McCabe
Introduction 9
Background 9
Prevalence and Epidemiology 9
Clinical Phenomenology 10
Comorbidity 11
Neurochemical Bases 11
Implications for Educators 12
Educational Strategies 14
Discussion Questions 14
Research Summary 15
Resources 15
Handout—Tourette Syndrome 16
SECTION II: Psychopharmacology

Chapter 6: Atypical Antipsychotic Use in Children and Adolescents With Autism Spectrum Disorders: A Review for Educators 50

Steven R. Shaw and Tamara Dawkins

Introduction 51
Background 51
The Effects of Atypical Antipsychotics on Symptoms of ASD 52
Side Effects 54
Conclusion 55
Implications for Educators 56
Educational Strategies 56
Discussion Questions 57
Research Summary 57
Resources 57
Handout—Use of Atypical Antipsychotic Medication With Children and Adolescents 59

Chapter 7: Tardive Dyskinesia With Typical and Atypical Antipsychotic Medications in Children and Adolescents 60

Daniel Farrell, Janine Fischer, and Paul C. McCabe

Introduction 61
Background 61
Symptoms and Diagnosis 61
Prevalence of TD 63
Treatment of TD 64
Implications for Educators 65
Educational Strategies 67
Discussion Questions 68
Research Summary 68
Resources 69
Handout—Tardive Dyskinesia 70

Chapter 8: Recent Advances in the Medical Management of Children With Attention Deficit/Hyperactivity Disorder 71

John S. Carlson, Angela Maupin, and Tara Brinkman

Introduction 72
Background 73
Psychostimulants 73
Atomoxetine 74
Novel and Alternative Medicines 75
Conclusion 76
Implications for Educators 77
Educational Strategies 78
Discussion Questions 78
Research Summary 78

John S. Carlson

Introduction 82
Background 83
Overview and Definitions 83
Risks Associated With Polypharmacy 83
Assumptions Associated With Polypharmacy 84
Medication Use in School-Aged Populations 85
Medication Use Within Vulnerable Populations 85
Prevalence of Polypharmacy in Childhood Populations 85
Cultural Considerations and Polypharmacy 86
Interventions 86
Implications for Educators 88
Educational Strategies 88
Discussion Questions 88
Research Summary 89
Resources 90
Handout—Polypharmacy Prescription Practices in School-Aged Populations 91

Chapter 10: Educational Implications of Commonly Used Pediatric Medications

Larry M. Bolen and Michael B. Brown

Introduction 94
Background 94
Medication Issues 94
Implications for Educators 97
Assessment 97
Intervention 98
Advocacy and Education 98
Conclusion 99
Educational Strategies 99
Discussion Questions 99
Research Summary 100
Resources 100
Handout—A Guide to Medication Side Effects 101

SECTION III: Dietary Control and Supplement Use

Chapter 11: Dietary Modification in the Treatment of Autism Spectrum Disorders

Caryn R. DePinna and Paul C. McCabe

Introduction 105
Background 105