IJNH

Review Article

Behavioral and Emotion Disorder in Childhood: A Review

Alpana Kale, Priyanka Salve

Department of Psychiatric Nursing, Maharashtra Institute of Mental Health, Pune, Maharashtra, India.

Abstract

Behavioral problems among school going children are of significant concern to teachers and parents. These are known to have both immediate and long-term unfavorable consequences. Mental health problems in children and adolescents include several types of emotional and behavioral disorders, including disruptive, depression, anxiety, and pervasive developmental (autism) disorders, characterized as either internalizing or externalizing problems. Disruptive behavioral problems such as temper tantrums, attention deficit hyperactivity disorder, oppositional, defiant, or conduct disorders are the most common behavioral problems in preschool and school age children. Childhood behavior and emotional problems with their related disorders have significant negative impacts on the individual, the family, and the society. They are commonly associated with poor academic, occupational, and psychosocial functioning. Despite the high prevalence, studies on psychiatric morbidity among school children are lacking in our country. Identification and management of mental health problems in primary care settings such as routine Paediatric clinic or Family Medicine/General Practitioner surgery are cost-effective because of their several desirable characteristics that make it acceptable to children and young people (e.g., no stigma, in local setting, and familiar providers). This review provides prevalence, etiology, neurobiology, complication, assessment, diagnosis, and management of behavioral and emotional disorders in children.

Keywords: Anxiety, autism, challenging behavior, childhood behavioral disorders, depression, emotional disorder

Introduction

Globally, nearly 20% of children and adolescents are affected by multiple intellectual disabilities.[1,2] Globally, nearly 20% of children and adolescents are affected by multiple intellectual disabilities. The alarming increases in the number of children and youths in low and middle-income countries leaves this population with insufficient care on the part of mental health providers, inadequate facilities, and weak services to manage their psychiatric health problems.[3]

Mental health disorders (MHD) are very common in childhood and they include emotional-obsessive-compulsive disorder (OCD), anxiety, depression, disruptive oppositional defiance disorder (ODD), conduct disorder (CD), attention deficit hyperactive disorder (ADHD), or developmental (speech/language delay, intellectual disability) disorders or pervasive (autistic spectrum) disorders.[4] Emotional and behavioral problems (EBP) or emotional and behavioral disorders (EBD) can also be classified as either "internalizing" (emotional disorders such as depression and anxiety) or "externalizing" (disruptive behaviors such as ADHD and CD). The terminologies of "problems" and "disorders" are interchangeably used throughout this article.

Although nonsense-free, defiant, or impulsive behavior is sometimes viewed as natural, extremely difficult, or challenging activities outside of normal age and development, such as erratic, persistent, and/or disruptive tonsils and serious outbreaks of temperatures, a lack of temper, the destruction of products or property in children at pre-school. Community studies have identified that more than 80% of preschoolers have mild tantrums sometimes but a smaller proportion, <10% will have daily tantrums, regarded as normative misbehaviors at this age.[5,6] Challenging behaviors and emotional difficulties are more likely to be recognized as "problems" rather than "disorders" during the 1st 2 years of life.[7]

Later childhood mental issues including anxiety, depression, and post-traumatic stress disorder (PTSD) appear to occur.

Access this article online
Website: http://innovationalpublishers.com/Journal/ijnh
ISSN No: 2454-4906
DOI: 10.31690/ijnh.2021.v07i01.001

Address for Correspondence:
Mrs. Priyanka Salve, Department of Psychiatric Nursing, Maharashtra Institute of Mental Health, Pune, Maharashtra, India. E-mail: sunny.s31@rediffmail.com

Parents or other carers also find it difficult to identify them early, because too many children lack sufficient vocabulary and understanding to intelligibly communicate their emotions.[8] Many physicians and practitioners often find escape from the intensity of the prolonged emotions that must be treated as disorders from evolving natural emotions (e.g., fears and weeping).[9] Chronic medical conditions including atopic dermatitis, obesity, diabetes, and asthma are also associated with mental issues, including a bad eating habit and self-image.[10-12]

Prevalence

The issue of the methodologies of research based on subjective judgments and different concepts used is that an accurate evaluation of different childhood EBPs is difficult. According to most studies, 10–20% children and young people (CYP) are affected by MHD each year and the rates for income, resident status, education, and community support among racial and ethnic groups are similar. Poverty and low socioeconomic status, however, are threats that seem to increase the population-based MHD rate.[13] A 2001 WHO report[14] indicated the 6-month prevalence rate for any MHD in CYP, up to age 17 years, to be 20.9%, with disruptive behavior disorders (DBD) at 10.3%, second only to anxiety disorders at 13%. About 5% of CYP in the general population suffer from depression at any given point in time, which is more prevalent among girls (54%).[15]

An anterior study carried out in 1999, by the National Statistics Office of 7977 interviews of parents, children, and teachers in British Mental Health in 1999 and 2004 found that 6% of the cases of behavioral disorder involving MHD (aged 5–16 years) are 6%, 4% are linked to emotional disorders (depression or anxiety), and 1.5% are related to hyperkinetic disorder.[15] A similar survey in the United States between 2005 and 2011, the National survey of children's health involving 78042 households, indicated that 4.6% of CYP aged 3–17 years had a history DBD, with prevalence twice as high among boys as among girls (6.2% vs. 3.0%), anxiety (4.7%), depression (3.9%), and autism spectrum disorders (ASD) (1.1%). Reported prevalence rates for disruptive mood dysregulation disorder range from 0.8% to 3.3% with the highest rate in preschool children.[16]

Etiology

The exact causes of various childhood EBPs are unknown. Several studies have established different combinations of genetic predisposition and adverse environmental factors which increase the risk of these disorders developing. This involves factors such as perinatal, maternal, family, family, parenting, social, and economic risks as well as personal risk.[17] A developmental taxonomy theory has been proposed by Patterson *et al*.[18] to help understand the mechanisms underlying early onset and course of conduct problems (CPs). They identified both prosocial and antisocial behavior, which contributes towards the unintentional worsening of children's behavior issues, through non-contingent parental reactions. Parents' involvement in manipulative cycles will lead children to learn the operative significance of their abnormal behavior, (e.g., physical aggression), as a means of escaping and avoiding unnecessary experiences, which will eventually lead children and parents to use enhanced abnormality to achieve social objectives. This adverse child behavioral training combined with social rejection often lead to deviant peer affiliation and delinquency in adolescence [Figure 1].[19]

Neurobiology

Conflicting findings have been reported in the brain structural variations among CYP with EBPs using magnetic resonance imaging (MRI) studies. The anatomical anomalies associated with DBD are most consistently recorded including decreased amygdala gray matter volume (GMV), frontal cortex, temporal lobes, and anterior insula that are part of a network that includes others' empathic concern. Reduced GMV along the superior temporal sulcus has also been found, particularly in girls.[20] A decreased overall mean cortical thickness, thinning of the cingulate, and prefrontal cortices; and decreased gray matter density in different brain regions have been reported.[21]

Many research studies on functional scans have documented subtle neurobiological changes in various parts of the CYP brain with EBPs. In hypothalamus, lower and higher parietal lobes, right amygdala, and anterior insula, improvements in the brain have been observed.[22] Functional MRI studies have demonstrated less activation in the temporal cortex in violent adult offenders[23] and in antisocial and psychopathic individuals[24] compared to non-aggressive offenders.

Reduced basal hypothalamic-pituitary-adrenal axis activity has been reported in relation to childhood DBDs and exposure to abuse and neglect.[25] High levels of prenatal testosterone exposure tend to be part of the dynamic etiology of EBDs. This explains higher prevalence of DBDs in men by enhancing their sensitivity to perinatal toxic conditions such as mother nicotine exposure and alcohol pregnancy.[26]

Complications

EBDs in childhood, if left untreated, may have negative short-term and long-term effects on an individual's personal, educational, family, and later professional life. CD has been linked to failure to complete schooling, attaining poor school achievement, poor interpersonal relationships, particularly family breakup and divorce, and experience of long-term unemployment. DBPs in parents have been linked to the abuse of their offspring, thereby increasing their risk of developing CD.[27,28] Children presenting with hyperactivity-inattention behaviors are more likely to have a more favorable educational outcome compared with those with aggression or oppositional behaviors.[29,30]

Several studies have confirmed a strong relationship between early childhood EBPs and poor future long-term physical

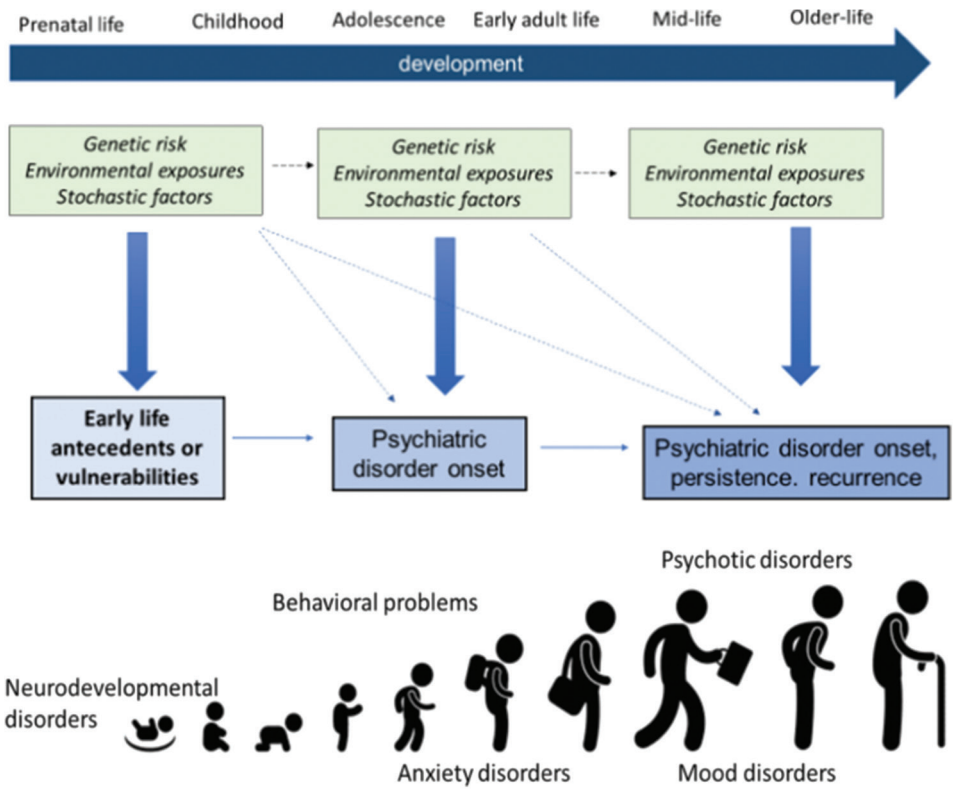

Figure 1: Psychiatric disorders in childhood: Onset and progression

and mental health outcomes. Chronic irritability in preschool children, CD and ODD in older children each may be predictive of any current and lifetime anxiety, depression, and DBDs in later childhood, mania, schizophrenia, OCD, major depressive disorder, and panic disorder.[31-33] Individuals on the adolescent-onset CP path often consume more tobacco and illegal drugs and engage more often in risky sexual behavior, self-harm, and have increased risk of PTSD, than individuals without childhood CPs. They also frequently experience parenting difficulties, including over-reactivity, lax and inconsistent discipline, child physical punishment, and lower levels of parental warmth and sensitivity.[34,35] Approximately 40–50% of CYP with CD are at the risk of developing antisocial personality disorder in adulthood. Other potential complications include adverse mental and physical health outcomes, social justice system involvement including incarceration, substance use and abuse, alcoholism, homelessness, poverty, and domestic abuse.[36]

Management

Identification of appropriate treatment strategies depends on careful assessment of the prevailing symptoms, the family and caregiver's influences, wider socioeconomic environment, the child's developmental level, and physical health. It requires multi-level and multi-disciplinarian approaches that include professionals such as psychologists, psychiatrists, behavioral analysts, nurses, social care staff, speech and language therapists, educational staff, occupational therapists, physiotherapists, pediatricians, and pharmacists. Use of pharmacotherapy is usually considered only in combination with psychological and other environmental interventions.[37]

Holistic management strategies will include various combinations of several interventions such as child and family-focused psychological strategies including cognitive behavioral therapy (CBT), behavioral modification, and social communication enhancement techniques, parenting skills training and psychopharmacology. These strategies can play significant roles in the management of children with a wide range of emotional, behavioral, and social communication disorders. Effective alternative educational procedures also need to be implemented for the school age children and adolescents.

In early childhood, similar parenting strategies have been found useful to manage several apparently dissimilar EBPs (e.g., infant feeding or sleeping problems, preschool tantrums, disruptive, and various emotional problems). This may suggest that there is a common maintaining mechanism, which is probably related to poor self-regulation skills, involving the ability to control impulses and expressions of emotion.[38]

Several studies have confirmed the effectiveness of various psychological and pharmacologic therapies in the management of childhood EBDs. A meta-analysis of thirty-six controlled trials, involving 3042 children (mean sample age, 4.7 years), evaluating the effect of psychosocial treatments including parenting programs on early DBPs, demonstrated large

and sustained effects (Hedges' g = 0.82), with the largest effects for general externalizing symptoms and problems of oppositionality and non-compliance, and were weakest, relatively speaking, for problems of impulsivity and hyperactivity.[39]

The treatment of CD among CYP with callous-unemotional traits is still at early stages of research. The mainstay of management for CDs includes individual behavioral or cognitive therapy, psychotherapy, family therapy, and medications.[40]

Parental Skills Training

Any challenging behavior from CYP is likely to elicit persistent negative reactions from many parents, using ineffective controlling strategies and a decrease in positive responses.[41] There is evidence from published research that social-learning and behaviorally based parent training is capable of producing lasting improvement in children with callous-unemotional traits or CD, reducing externalizing problems for children with DBDs, leading to significant parent satisfaction, particularly when delivered early in childhood.[42-44] Pooled estimates from a review of 37 randomized controlled studies identified a statistically significant improvement on several rating scales among children with CD up to the age of 18 years.[45] A previous meta-analysis of 24 studies confirmed that parent-child interaction therapy demonstrated significantly larger effect sizes for reducing negative parent behaviors, negative child behaviors, and caregiver reports of child behavior problems than did most or all forms of Positive Parenting Programme (Triple P).[46] A recent Cochrane review of 13 studies confirmed the efficacy and cost-effectiveness of group-based parenting interventions for alleviating child CPs, enhancing parental mental health and parenting skills, at least in the short term.[47]

Differentiated Educational Strategies

Research has focused on identifying alternative educational strategies that can be used to improve learning opportunities for children presenting with challenging behaviors from various causes. Supportive school strategies for children with EBDs have traditionally focused on classroom management, social skills and anger management, but many researchers have more recently argued that academically-focused interventions may be most effective.[48] Traditional school policies of suspending or expelling children with EBD can be harmful to them. Researchers have developed "step-by-step" guidelines for teachers to guide them in the selection and implementation of evidence-based strategies that have been identified as effective in increasing levels of engagement and achievement by children with EBD, including peer-assisted learning procedures, class-wide peer tutoring, self-management interventions, and tiered intervention systems – most notably Response to Intervention and Positive Behavioral Interventions and Supports.[49,50] There is increasing evidence to confirm that school-based interventions to address emerging DBPs produce significant reductions in both parent, self and teacher-reported internalizing and externalizing symptoms.[51]

Treatment and Education of Autistic and Related Communication Handicapped Children (TEACCH) is an educational system designed for the management of children with Autism and related communication disorders.[52] There is some evidence that TEACCH programs also lead to some improvements in motor skills and cognitive measures.[53]

Child-focused Psychological Interventions

CBT is one of the most widely used non-pharmacologic treatments for individuals with emotional disorders, especially depression, and with individuals with behavioral problems including ASD.[54] CBT integrates a combination of both cognitive and behavioral learning principles to encourage desirable behavior patterns. Research evidence from several trials[55] provides strong support for the effectiveness of cognitive-behavioral interventions among CYP with anxiety and depression. A recent study of child-focused CBT program introduced at schools has shown that it produces significant improvement in disruptive behaviors among children.[56]

Self-esteem building strategies can help many children with EBDs, who often experience repeated failures at school and in their interactions with others. These children could be encouraged to identify and excel in their particular talents (such as sports) to help build their self-esteem.

Conclusion

Prevention and management of EBD is not easy and it requires an integrated multidisciplinary effort by healthcare providers at different levels to be involved in the assessment, prevention and management of affected individuals, and also to provide social, economic, and psycho-emotional support to the affected families.

References

1. World Health Organization. The World Health Report: Making Every Mother and Child Count. Geneva: World Health Organization; 2005.
2. Malhotra S, Kohli A, Kapoor M, Pradhan B. Incidence of childhood psychiatric disorders in India. Indian J Psychiatry 2009;51:101-7.
3. Hallen N. The Situation of Children in India: A Profile. New York: UNICEF; 2011.
4. Parry TS. Assessment of developmental learning and behavioural problems in children and young people. Med J Aust 2005;183:43-8.
5. Hong JS, Tillman R, Luby JL. Disruptive behavior in preschool children: distinguishing normal misbehavior from markers of current and later childhood conduct disorder. J Pediatr 2015;166:723-30.e1.
6. Wakschlag LS, Choi SW, Carter AS, Hullsiek H, Burns J, McCarthy K, *et al*. Defining the developmental parameters of temper loss in early childhood: Implications for developmental psychopathology. J Child Psychol Psychiatry 2012;53:1099-108.
7. Bagner DM, Rodríguez GM, Blake CA, Linares D, Carter AS. Assessment of behavioral and emotional problems in infancy: A systematic review. Clin Child Fam Psychol Rev 2012;15:113-28.
8. El-Radhi AS. Management of common behaviour and mental health problems. Br J Nurs 2015;24:586, 588-90.
9. Gardner F, Shaw DS. Behavioral problems of infancy and preschool

children (0-5). In Rutter's Child and Adolescent Psychiatry. 5th ed., Ch. 53. 2009.
10. Lu Y, Mak KK, van Bever HP, Ng TP, Mak A, Ho RC. Prevalence of anxiety and depressive symptoms in adolescents with asthma: A meta-analysis and meta-regression. Pediatr Allergy Immunol 2012;23:707-15.
11. Chernyshov PV, Ho RC, Monti F, Jirakova A, Velitchko SS, Hercogova J, *et al*. Gender differences in self-assessed health-related quality of life in children with atopic dermatitis. J Clin Aesthet Dermatol 2016;9:19-24.
12. Quek YH, Tam WW, Zhang MW, Ho RC. Exploring the association between childhood and adolescent obesity and depression: A meta-analysis. Obes Rev 2017;18:742-54.
13. National Research Council/Institute of Medicine. Adolescent Health Services: Highlights and Considerations for State Health Policymakers. Washington, DC: National Research Council; 2009. p. 1-25. Available from: http://www.nashp.org/sites/default/files/AdolHealth.pdf. [Last accessed on 2021 Feb 02].
14. World Health Organization. Mental Health: New Understanding New Hope. Geneva: World Health Organization; 2001.
15. Green H, McGinnity A, Meltzer H, Ford T, Goodman R. Mental Health of Children and Young People in Great Britain 2004. New York: Palgrave Macmillan; 2005.
16. Copeland WE, Angold A, Costello EJ, Egger H. Prevalence, comorbidity, and correlates of DSM-5 proposed disruptive mood dysregulation disorder. Am J Psychiatry 2013;170:173-9.
17. Boden JM, Fergusson DM, Horwood LJ. Risk factors for conduct disorder and oppositional/defiant disorder: Evidence from a New Zealand birth cohort. J Am Acad Child Adolesc Psychiatry 2010;49:1125-33.
18. Patterson GR, DeBaryshe BD, Ramsey E. A developmental perspective on antisocial behavior. Am Psychol 1989;44:329-35.
19. Brennan LM, Shaw DS. Revisiting data related to the age of onset and developmental course of female conduct problems. Clin Child Fam Psychol Rev 2013;16:35-58.
20. Michalska KJ, Decety J, Zeffiro TA, Lahey BB. Association of regional gray matter volumes in the brain with disruptive behavior disorders in male and female children. Neuroimage Clin 2014;7:252-7.
21. Fahim C, He Y, Yoon U, Chen J, Evans A, Pérusse D. Neuroanatomy of childhood disruptive behavior disorders. Aggress Behav 2011;37:326-37.
22. Sebastian CL, McCrory EJ, Cecil CA, Lockwood PL, De Brito SA, Fontaine NM, *et al*. Neural responses to affective and cognitive theory of mind in children with conduct problems and varying levels of callous-unemotional traits. Arch Gen Psychiatry 2012;69:814-22.
23. Raine A, Yang Y, Narr KL, Toga AW. Sex differences in orbitofrontal gray as a partial explanation for sex differences in antisocial personality. Mol Psychiatry 2011;16:227-36.
24. Kiehl KA, Smith AM, Mendrek A, Forster BB, Hare RD, Liddle PF. Temporal lobe abnormalities in semantic processing by criminal psychopaths as revealed by functional magnetic resonance imaging. Psychiatry Res 2004;130:27-42.
25. Kohrt BA, Hruschka DJ, Kohrt HE, Carrion VG, Waldman ID, Worthman CM. Child abuse, disruptive behavior disorders, depression, and salivary cortisol levels among institutionalized and community-residing boys in Mongolia. Asia Pac Psychiatry 2015;7:7-19.
26. Martel MM, Roberts BA. Prenatal testosterone increases sensitivity to prenatal stressors in males with disruptive behavior disorders. Neurotoxicol Teratol 2014;44:11-7.
27. National Institute for Health and Clinical Excellence. Parent-training/Education Programmes in the Management of Children with Conduct Disorders. London: National Institute for Health and Clinical Excellence; 2006.
28. Smith JD, Dishion TJ, Shaw DS, Wilson MN, Winter CC, Patterson GR. Coercive family process and early-onset conduct problems from age 2 to school entry. Dev Psychopathol 2014;26:917-32.
29. Lynch RJ, Kistner JA, Allan NP. Distinguishing among disruptive behaviors to help predict high school graduation: does gender matter? J Sch Psychol 2014;52:407-18.
30. Serra-Pinheiro MA, Mattos P, Regalla MA, de Souza I, Paixão C. Inattention, hyperactivity, oppositional-defiant symptoms and school failure. Arq Neuropsiquiatr 2008;66:828-31.
31. Dougherty LR, Smith VC, Bufferd SJ, Kessel E, Carlson GA, KleinDN. Preschool irritability predicts child psychopathology, functional impairment, and service use at age nine. J Child Psychol Psychiatry 2015;56:999-1007.
32. Stringaris A, Lewis G, Maughan B. Developmental pathways from childhood conduct problems to early adult depression: Findings from the ALSPAC cohort. Br J Psychiatry 2014;205:17-23.
33. Luby JL, Gaffrey MS, Tillman R, April LM, Belden AC. Trajectories of preschool disorders to full DSM depression at school age and early adolescence: Continuity of preschool depression. Am J Psychiatry 2014;171:768-76.
34. Kretschmer T, Hickman M, Doerner R, Emond A, Lewis G, Macleod J, *et al*. Outcomes of childhood conduct problem trajectories in early adulthood: findings from the ALSPAC study. Eur Child Adolesc Psychiatry 2014;23:539-49.
35. Burke JD, Waldman I, Lahey BB. Predictive validity of childhood oppositional defiant disorder and conduct disorder: Implications for the DSM-V. J Abnorm Psychol 2010;119:739-51.
36. Fergusson DM, Horwood LJ, Ridder EM. Show me the child at seven: The consequences of conduct problems in childhood for psychosocial functioning in adulthood. J Child Psychol Psychiatry 2005;46:837-49.
37. National Institute for Health and Clinical Excellence. Challenging Behaviour and Learning Disabilities: Prevention and Interventions for People with Learning Disabilities Whose Behaviour Challenges. United Kingdom: National Institute for Health and Clinical Excellence; 2015.
38. Shaw DS, Bell RQ. Developmental theories of parental contributors to antisocial behavior. J Abnorm Child Psychol 1993;21:493-518.
39. Comer JS, Chow C, Chan PT, Cooper-Vince C, Wilson LA. Psychosocial treatment efficacy for disruptive behavior problems in very young children: A meta-analytic examination. J Am Acad Child Adolesc Psychiatry 2013;52:26-36.
40. Hawes DJ, Price MJ, Dadds MR. Callous-unemotional traits and the treatment of conduct problems in childhood and adolescence: A comprehensive review. Clin Child Fam Psychol Rev 2014;17:248-67.
41. Cunningham CE, Boyle MH. Preschoolers at risk for attention-deficit hyperactivity disorder and oppositional defiant disorder: Family, parenting, and behavioral correlates. J Abnorm Child Psychol 2002;30:555-69.
42. Gardner F, Burton J, Klimes I. Randomised controlled trial of a parenting intervention in the voluntary sector for reducing child conduct problems: Outcomes and mechanisms of change. J Child Psychol Psychiatry 2006;47:1123-32.
43. Hutchings J, Gardner F, Bywater T, Daley D, Whitaker C, Jones K, *et al*. Parenting intervention in Sure Start services for children at risk of developing conduct disorder: Pragmatic randomised controlled trial. BMJ 2007;334:678.
44. Perrin EC, Sheldrick RC, McMenamy JM, Henson BS, Carter AS. Improving parenting skills for families of young children in pediatric settings: A randomized clinical trial. JAMA Pediatr 2014;168:16-24.
45. Dretzke J, Frew E, Davenport C, Barlow J, Stewart-Brown S, Sandercock J, *et al*. The effectiveness and cost-effectiveness of parent training/education programmes for the treatment of conduct disorder, including oppositional defiant disorder, in children. Health Technol Assess 2005;9:1-233.
46. Thomas R, Zimmer-Gembeck MJ. Behavioral outcomes of parent-child interaction therapy and triple p-positive parenting program: A review and meta-analysis. J Abnorm Child Psychol 2007;35:475-95.
47. Furlong M, McGilloway S, Bywater T, Hutchings J, Smith SM, Donnelly M. Cochrane review: Behavioural and cognitive-behavioural group-based parenting programmes for early-onset conduct problems in children aged 3 to 12 years. Evid Based Child Health 2013;8:318-692.
48. Lane KL. Identifying and supporting students at risk for emotional and behavioral disorders within multi-level models: Data driven approaches to conducting secondary interventions with an academic emphasis. Educ Treatment Children 2007;30:135-64.
49. Farley C, Torres C, Wailehua CU, Cook L. Evidence-based practices for students with emotional and behavioral disorders: Improving academic achievement. Beyond Behav 2012;21:37-43.
50. Winther J, Carlsson A, Vance A. A pilot study of a school-based prevention and early intervention program to reduce oppositional defiant disorder/conduct disorder. Early Interv Psychiatry 2014;8:181-9.
51. Horner RG, Sugai G, Vincent C. School-wide positive behavior support:

Investing in student success. Impact 2005;18:4.
52. Mesibov GB, Shea V, Schopler E. The TEACCH Approach to Autism Spectrum Disorders. New York: Springer-Verglag; 2007. p. 211.
53. Warren Z, Weele JV, Stone W, Bruzek JL, Nahmias AS, Foss-Feig JH, *et al*. Therapies for Children With Autism Spectrum Disorders. Rockville, MD: Agency for Healthcare Research and Quality; 2011.
54. Lindgren S, Doobay A. Evidence-Based Interventions for Autism Spectrum Disorders; 2011. Available from: http://www.interventionsunlimited.com/editoruploads/files/Iowa%20DHS%20Autism%20Interventions%206-10-11.pdf. [Last accessed on 2021 Feb 02].
55. Ollendick TH, King NJ. Empirically supported treatments for children with phobic and anxiety disorders: Current status. J Clin Child Psychol 1998;27:156-67.
56. Liber JM, De Boo GM, Huizenga H, Prins PJ. School-based intervention for childhood disruptive behavior in disadvantaged settings: A randomized controlled trial with and without active teacher support. J Consult Clin Psychol 2013;81:975-87.

How to cite this article: Kale A, Salve P. Behavioral and Emotion Disorder in Childhood: A Review. Innov J Nurs Healthc. 2021;7(1):1-6.