



CASE REPORT

Usefulness Of Homoeopathic Medicine in Oppositional Defiant Disorder (ODD):A Case Report

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Received: 25.05.2022

Accepted: 25.07.2022

Abstract

Oppositional Defiant Disorder (ODD) is a disruptive behavioural disorder in which a child displays a pattern of an angry mood, defiant or combative behaviour, and vindictiveness toward people in authority. The child's behaviour often disrupts their daily routine, including activities within the family and at school. An 18-year-old male reported in the Out Patient Department with symptoms of anger and vindictiveness. The consultant psychiatrist diagnosed it as a case of Oppositional Defiant Disorder (ODD). Disruptive Behaviour Disorder Rating Scale (DBDRS) – ODD items was used to assess the severity of the disease. Modified Naranjo Criteria was used to assess whether the changes were likely to be associated with the homoeopathic intervention. Overall improvement was noticed clinically. DBDRS score was 22 at the time of admission. *Sepia 200* was selected as the individualized homeopathic medicine. His symptoms got improved and he was discharged. DBDRS score was reduced to 0 at the end of 16 months. Individualized homoeopathic treatment has shown a positive role for the management and treatment of disruptive behavioural disorder.

Keywords: Oppositional Defiant Disorder, Homoeopathy, Psychiatry, *Sepia*, *Natrum Muriaticum*, DBDRS.

INTRODUCTION

Oppositional Defiant Disorder (ODD) is identified by persistent defiant, noncompliant, and antagonistic behavior and by persisting irritability and anger. It usually has an early onset in childhood. Although often being recognized as a disorder of childhood, ODD persists into adulthood. ODD pervasively impairs functioning over the life span, causing difficulties in interpersonal relationships and social functioning, academic and occupational functioning, and in familial relationships.¹

According to the Diagnostic and Statistical Manual of Mental Disorders-5², for the diagnosis of ODD, at least 4 among the following symptoms should persist for at least 6 months:

Angry/Irritable Mood

1. Often loses temper.
2. Is often touchy or easily annoyed.
3. Is often angry and resentful.

Argumentative/Defiant Behavior

4. Often argues with authority figures or, for children and adolescents, with adults.
5. Often actively defies or refuses to comply with requests from authority figures or with rules.

6. Often deliberately annoys others.
7. Often blames others for his or her mistakes or misbehavior.

Vindictiveness

8. Has been spiteful or vindictive at least twice within the past 6 months.²

Community samples show a prevalence rate for ODD ranging between 2 and 14 %.

The disorder is more prevalent in boys than in girls with ratio ranging from 3:1 to 9:1.³ A prevalence study conducted in India found that the prevalence of ODD among primary school children was found to be 7.73% with male and female being equally affected.⁴ Srinath et al reported a point prevalence for conduct and oppositional defiant disorder to be 1.3%.⁵

A meta-analysis by Angold et al indicated that Conduct Disorder, Attention Deficit Hyperactivity Disorder (ADHD), depressive disorder and anxiety disorders co-exist with ODD.⁶ The estimated prevalence of ODD in clinical ADHD samples is around 50%, much higher than in the general population.⁷ Kadesjo et al comparing children with



ADHD with and without ODD found that the ADHD combined sub-type with higher severity of ADHD symptoms were seen more often in the comorbid group.⁸

There are multiple risk factors related with the etiology of ODD. The role of genetics, neuroanatomy and neurochemistry have been suggested. Research established the association between familial negativity and adolescent antisocial behavior, although a modest effect for nonshared familial environment was also found.⁹

Lower socioeconomic status has shown a strong association with children's behavioral problems. Parenting style has also shown a strong association with children's behavioral problems, especially with ODD. Parenting behavior and socioeconomic status seems also related to each other. A link was found between economic stress in family life and adolescent internalizing and externalizing behavioral symptoms.¹⁰

The association between neuroanatomical regions and disruptive behaviour is still under research. Both the meta-analytic and narrative reviews showed evidence of smaller brain structures and lower brain activity in individuals with ODD/CD in areas like: bilateral amygdala, bilateral insula, right striatum, left medial/superior frontal gyrus, and left precuneus.¹¹

During the past decade, increasing attention has been given to the study of neurochemistry associated with Disruptive Behavioural Disorders. Serotonin has been, to a large extent, linked to aggressive behaviour. Low levels of a serotonin metabolite (5-hydroxy-indoleacetic acid) in cerebrospinal fluid have been linked to concurrent and future aggression in children. The link between serotonin and aggression likely reflects a more complex relationship between neuroanatomical and neurochemical interconnectivity, executive brain function, and behavioural dysregulation. Low levels of salivary cortisol and increased testosterone has also been associated with aggressive behaviour.¹²

Some researchers maintain that ODD is a relatively benign disorder with good prognosis.¹³ Factor analysis and other studies suggest that if behavioural and emotional symptoms of ODD persists or worsen, it may predict later development of behavioural and emotional disorders such as depression, anxiety, ADHD or conduct disorder.^{14,15}

Individuals with both ADHD and ODD have a considerably worse prognosis than individuals with either one of the disorders in terms of an increased risk to develop anxiety and depressive disorders as

well as conduct disorder and even antisocial personality disorder later in life.^{16,17} This, in turn is related to high rates of domestic violence, unemployment and homelessness. Functional outcomes associated with ODD through childhood and adolescence include conflict within families, poor peer relationships, peer rejection and academic difficulties. Little examination of functional outcomes in adulthood associated with ODD has been undertaken.^{18,19}

The impairment associated with behavioral disorders in childhood may persist through adolescence and adulthood, which places youth on a path for future school drop-out, substance use, delinquency, incarceration, criminal behaviors, and premature death. Disruptive behaviors may also lead to maternal stress, which may result in poor parenting, further contributing to children's emotional difficulties.²⁰

The Disruptive Behaviour Disorder Rating Scale (DBDRS) is a screening tool designed to aid in the diagnostic process for a number of child psychopathologies, particularly externalizing disorders. The DBD rating scale consists of 45 items related to symptoms of Conduct disorder (16 items), ODD (8 items), ADHD-Inattention (9 items), ADHD- hyperactivity/ Impulsivity (9 items). These items relate directly to the 36 DSM-III-R diagnostic criteria for Conduct Disorder, Oppositional Defiance Disorder and Attention Deficit Hyperactivity Disorder and are randomly ordered across diagnostic categories. Each item is rated on a four-point scale ranging from not at all (0), just a little (1), pretty much (2) to very much (3).²¹

The Modified Naranjo Criteria for Homeopathy—Causal Attribution Inventory was used for assessing the likelihood of a causal relationship between a homeopathic intervention and clinical outcome. The strength of association between the medicine and outcome was assessed by the following criteria: definite: ≥ 9 ; probable 5-8; possible 1-4; and doubtful ≤ 0 .²²

Homoeopathy is a system of medicine which is beneficial in mental disorders. Few case reports had been published and it shows that there is a positive role for homoeopathy in the management of ODD and CD cases.^{23,24,25}

CASE PRESENTATION

Presenting complaints

Angered easily

- Arguing and stubborn.
- Abusive



- Quarreling tendency with parents
- Threatening and striking his parents occasionally.
- Indifferent attitudes to family members.

A boy aged 18 years, was brought to the Out Patient Department of a tertiary care hospital in South India with above complaints presenting since 1 year. He got admitted in the In-Patient Department from 6/10/2017 to 12/12/2017.

History of presenting complaints

Since childhood, his parents were very strict and dominating. They didn't give freedom to him and he had to follow their commands without any objection. So, he had to lose his friends and enjoyments as he wishes. He started to show defiant behavior since childhood, but the complaints have got aggravated for an year.

He had a love affair, when he was studying in higher secondary school, but his mother gave many reasons for rejecting her and he had to drop the relationship. Henceforth, he developed severe anger towards his parents and frequently argued with them over trivial matters. He started to contradict them and compelled them to fulfill his wishes immediately without taking into concern their financial background. When his wishes were not complied, he used to threaten them like, he is going to die or leave home. He scolded his parents in a disrespectful way. He used to beat them occasionally. When they tried to console him, his anger became more severe and he replied to them he was retaliating.

Treatment history

Not taken any treatment yet.

History of past illness

Nothing particular.

Family history

No relevant psychiatric complaints noted in family.

Life space investigation

Patient hailed from a middle-class family in South India. He was the eldest among two children. He was brought up by his parents. He was average in studies. He didn't have any interest in extracurricular activities. He had an indifference towards his family members.

His father was an occasional drinker. But he didn't make any disputes because of that nor affected the family environment. Mother has short temper and quarrels frequently with everyone at home for trivial things. She is strict in all aspects, which caused the child to suppress his anger.

Physical generals

He has craving for sour. He has profuse sweat on palms. Thermally he was chilly.

Clinical findings (mental status examination baseline)

It is represented in Table 1.

Table 1. Mental Status Examination

| S. No | Domains | Before treatment | After treatment |
|-------|--|---|--|
| 1 | General appearance and behavior | Conscious, aware of his surroundings, poorly kempt, hair was untidy, lean built. Rapport: Not established. Eye to Eye Contact: Maintained Inter Personal Relationship: Poor | Conscious, aware of his surroundings. Well kempt. Hair neatly combed. Lean built. Rapport: established. Eye to Eye Contact: Maintained. Inter Personal Relationship: improved well |
| 2 | Psychomotor activity | NAD | NAD |
| 3 | Speech | Normal | Normal |
| | Tone | Irritable | Normal |
| 4 | Affect | Appropriate | Appropriate |
| 5 | Mood | Subjective: Irritable Objective: Irritable | Subjective: Euthymic Objective: euthymic |
| | Thoughts | NAD | NAD |
| 6 | Perceptual disorders | Nil | Nil |
| | Hallucinations | Nil | Nil |
| 7 | Illusions | Nil | Nil |
| | Orientation to | Well oriented to time, place and person | Well oriented to time, place and person |
| 8 | Memory | Good | Good |
| 9 | Attention and concentration | Good | Good |
| 10 | Abstract thinking | Good | Good |
| 11 | Judgement | Social judgement: Poor. Test judgement: Good | Social judgement: Good Test judgement: Good |
| 12 | Insight | Complete denial of illness | Aware of his illness |



TIMELINE

The follow up of the case is depicted in Table 2.

Table 2. Two years follow- up of the case.

| SL NO. | DATE | SYMPTOMS | HOMOEOPATHIC PRESCRIPTION |
|--------|------------|--|---|
| 1. | 06/10/2017 | Angered easily. Arguing and stubborn. Abusive. Quarreling tendency with parents. Threatening and striking his parents occasionally. Indifferent attitude to family members. | Sepia 200/1D repeated once in a week for a month. |
| 2. | 02/01/2018 | Complaint of getting angry easily was reduced. Arguing and stubbornness were reduced. Abusive tendency reduced. Quarreling tendency with parents was present on and off. No tendency to threaten or strike his parents. Indifferent attitude to family members-reduced. | Totally 6 doses of Sepia 200 were prescribed. Advised to stop the medicine once complaints felt better, and asked them to keep the rest of the medicine as S.O.S. |
| 3. | 10/04/2018 | Neatly dressed and well kempt. Anger outburst reduced well. Arguing and stubbornness were reduced well. Started establishing rapport. Abusive-reduced well. Quarreling tendency with parents-reduced. Threatening and striking his parents-Nil. Indifferent attitude to family members-reduced well. | He had taken all the 6 doses. So, Sepia 200/6D were repeated and advised to stop when he feels better/ improved. |
| 4. | 05/07/2018 | Neatly dressed and well kempt. Anger-on and off. Amelioration of arguing and stubbornness. Abusive-reduced well. Quarreling tendency with parents-reduced. Rapport established with the examiner. Threatening and striking his parents-Nil. Indifferent attitude to family members-reduced well. | Whenever he stopped taking Sepia 200, his complaints were reappearing, but with less intensity. So, Sepia 1M /3D were given as S.O.S followed by placebo. |
| 5. | 09/10/2018 | Neatly dressed and well kempt. Anger-Under control. Arguing and stubbornness -reduced but still persist. Not abusive. Rapport established with the examiner. Quarreling tendency with parents-reduced well. Threatening and striking his parents-Nil. Indifferent attitude to family members-reduced well. | He had taken 2 doses and felt much better. Sepia 1M/3D prescribed. |
| 6. | 08/01/2019 | Complaints were reduced well. He happened to meet his ex-lover. Henceforth, he felt disappointed, and wept in his room. Constant thoughts of her. | Natrium mur 200/4D were prescribed. |
| 7. | 09/04/2019 | All his complaints were reduced and felt much better than before. | Sepia 1M/ 3D were prescribed as S.O.S but he hadn't taken it. |
| 8. | 04/07/2019 | All his complaints were reduced and felt much better than before. | Sepia 1M/ 3D were prescribed as S.O.S but he hadn't taken it. |
| 9. | 08/10/2019 | Generally better. Attending job regularly without any behavioural issues. Had Adequate inter- personal relationship. | Sepia 1M/ 3D were prescribed as S.O.S but he hadn't taken it. |

The patient is still continuing regular OPD follow-up. No behavioral changes were reported. He has been fully functional in family and occupationally. Occasionally, *Sepia* and *Nat mur* were prescribed, according to his complaints, to prevent any deterioration.

DIAGNOSIS ASSESSMENT

Consultant Psychiatrist diagnosed the case based on Diagnostic and Statistical Manual of Mental Disorders-V criteria for ODD.

THERAPEUTIC INTERVENTION

Individualized homoeopathy medicine was administered to the patient. Considering the causative factor, mental and physical generals,



totality was erected. Repertorization was done using Synthesis Repertory. Repertorisation is the specific technique of taking the “totality of symptoms” of a given disease and then using a compilation of these

indications, cross-referenced to medicinal agents, to find the curative remedy for the given disease. Repertorization chart is depicted in Figure 1.

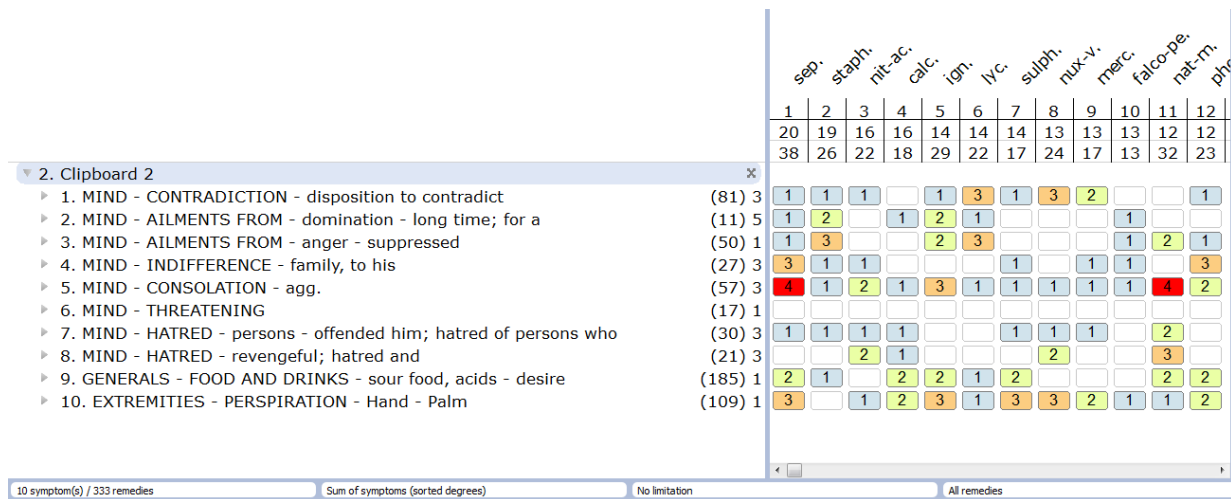


Figure 1. Repertorization chart

Sepia, Staphysagria and Nitric acid were the first three remedies. Sepia was selected based upon the strong indifferent attitude towards the family members, easily offended nature, causative factor, perspiration of palms and thermally chilly.

Since the causative factor of Staph. like ill effects of anger and insult, anger outburst with throwing things, sensitive to the opinion of others were not matching with the constitution of the patient. So, Staph. was avoided.

Even though Nitric acid has covered symptoms of the patient like irritability, unforgiving nature and vindictiveness, the causative factor is not covered by Nit acid.

Sepia 200 CH and 1M potency were prescribed and repetition was done when needed.

Patient improved well symptomatically. In between, he was complaining of sadness, thoughts about his disappointed love, desire to be alone, and weeping when alone. So, he was prescribed a dose of Nat mur 200 CH. Nat mur is complementary to Sepia and was covering the symptoms of the patient.

DISCUSSION

Psychosocial theorists have hypothesized that certain social stressors or situations can contribute to the development of the disorder. These include parental problems in disciplining and limit setting with the child (i.e., too lenient, too strict, or inconsistent), parent-child attachment deficits, or

identification with an impulse-disordered parent. The reason for the development of the psychopathology of ODD in this case could have been parental domination as well as unrevealed verbal emotions. The derangement of the personality has affected the social, occupational and familial life of the patient.

“Unexpressed emotions will never die. They are buried alive and will come forth later in uglier ways.” This is a meaningful quote by Sigmund Freud, the father of psychoanalysis. The significance of the quote can be related to the situation of the patient in this case report. Since childhood, he was suffering from domination and never got a chance to fulfil to his childish aspirations. As a child, he was not able to verbalize or express his disapproval to his parent’s behaviour. His mother revealed that, patient never spoke about his feelings with them. Gradually, he developed defiant behaviour, which got worse when his mother insisted separation from his girlfriend. So, the defiant behaviour escalated to abusiveness, frequent arguments and even hurting tendency to parents occasionally.

Disruptive Behaviour Disorder Rating Scale (DBDRS) was used at baseline, and every six months for 2 years. It scored 22 at the beginning of the treatment. Gradually, it got reduced to 0 within 1½ years treatment. Assessment of the scale is depicted in Table 3. No adjunctive therapies were given to the patient during this 2-years period.

**Table 3.** Disruptive Behaviour Disorder Rating Scale- ODD items.

| S.no | Domains | Baseline | At the end of 6 th month | At the end of 1 st year | At the end of 1 ½ year | At the end of 2 nd year |
|--------------|---|-----------|-------------------------------------|------------------------------------|------------------------|------------------------------------|
| 1 | Often argues with adults | 3 | 2 | 1 | 0 | 0 |
| 2 | Is often spiteful or vindictive | 3 | 2 | 0 | 0 | 0 |
| 3 | Often blames others for his or her mistakes or misbehavior | 3 | 2 | 0 | 0 | 0 |
| 4 | Often actively defies or refuses to comply with adults' requests or rules | 3 | 2 | 1 | 0 | 0 |
| 5 | Is often angry and resentful | 3 | 2 | 0 | 0 | 0 |
| 6 | Is often touchy or easily annoyed by others | 2 | 1 | 0 | 0 | 0 |
| 7 | Often loses temper | 3 | 2 | 0 | 0 | 0 |
| 8 | Often deliberately annoys people | 2 | 1 | 0 | 0 | 0 |
| TOTAL | | 22 | 14 | 2 | 0 | 0 |

Although the study of a single case does not constitute a strong opinion, the outcome is encouraging. The causal attribution was established

using the Modified Naranjo Criteria, the score was 8, i.e., 'probable' as given in Table 4.

Table 4. Assessment by Modified Naranjo Criteria during follow-up of the case

| S.No | CRITERIA | Yes | No | Not Sure | Case |
|------|---|-----|----|----------|------|
| 1 | Was there an improvement in the main symptom or condition for which the homeopathic medicine was prescribed? | +2 | -1 | 0 | +2 |
| 2 | Did the clinical improvement occur within a plausible Time frame relative to the drug intake? | +1 | -2 | 0 | +1 |
| 3 | Was there an aggravation of symptoms? | +1 | 0 | 0 | 0 |
| 4 | Did the effect encompass more than the main symptom or condition, i.e. were other symptoms ultimately improved or changed? | +1 | 0 | 0 | +1 |
| 5 | Did overall wellbeing improve? | +1 | 0 | 0 | +1 |
| 6 | (A) <i>Direction of cure:</i> Did some symptoms improve in the opposite order of the development of symptoms of the disease? (B) <i>Direction of cure:</i> Did at least two of the following aspects apply to the order of improvement of symptoms: - from organs of more importance to those of less importance - from deeper to more superficial aspects of the individual - from the top downwards | +1 | 0 | 0 | 0 |
| 7 | Did "old symptoms" (defined as non-seasonal and noncyclical symptoms that were previously thought to have resolved) reappear temporarily during the course of improvement? | +1 | 0 | 0 | +1 |
| 8 | Are there alternate causes (other than the medicine) that – with a high probability – could have caused the improvement? (Consider known course of disease, other forms of treatment, and other clinically relevant interventions) | -3 | +1 | 0 | 0 |
| 9 | Was the health improvement confirmed by any objective data?(DBDRS). | +2 | 0 | 0 | +2 |
| 10 | Did repeat dosing, if conducted, create similar clinical improvement? | +1 | 0 | 0 | 0 |



After homoeopathic treatment, the patient completed his studies and is now attending his job regularly. He is now cooperative and adjusts with his family as well as working situations.

CONCLUSION

Oppositional Defiant Disorder is seen to escalate to conduct disorder and anti-social personality disorder in the due course. Given the negative outcomes associated with behavioral challenges as children transit to adolescence and adulthood, detecting these emerging behavioral challenges early is critical in developing appropriate interventions. This case report shows that homoeopathy can offer a promising result in the management of ODD.

ACKNOWLEDGEMENT

The authors are thankful to Dr. K.C. Muraleedharan, Assistant Director and Dr. N. D. Mohan, H.O.D

Dept. of Psychiatry, National Homoeopathy Research Institute in Mental Health, Kerala. They are also obliged to the participant and the care givers for their valuable inputs which made the study possible.

Funding: No fund received.

Author contributions: Conceptualization: KM; Design: KM; Writing: RP; Investigation/Data collection: RP.

Conflict of interest: The Authors declare that there are no conflicts of interest.

Statement of ethics: The authors certify that, they have obtained all appropriate care-giver consent form from the parent as well as received verbal assent from the patient. The patient and care-giver understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

REFERENCES

1. Burke JD, Romano-Verthelyi AM. Oppositional defiant disorder. In *Developmental Pathways to Disruptive, Impulse-Control and Conduct Disorders*. Elsevier Academic Press; 2018: 21-5.
2. American Psychiatric Association. *Diagnostic and statistical manual of mental disorders: DSM-5 (5th ed.)*. Washington, DC: American Psychiatric Association; 462-466.
3. Boylan K, Vaillancourt T, Boyle M, Szatmari P. Comorbidity of internalizing disorders in children with oppositional defiant disorder. *Eur. Child Adolesc. Psychiatry*. 2007; 16(8): 484-494.
4. Mishra A, Garg SP, Desai SN. Prevalence of oppositional defiant disorder and conduct disorder in primary school children. *Journal of Indian Academy of Forensic Medicine*. 2014; 36: 246-250.
5. Srinath S, Girimaji SC, Gururaj G, et al. Epidemiological study of child & adolescent psychiatric disorders in urban and rural areas of Bangalore, India. *Indian J Med Res* 2005; 122:67-79.
6. Angold A, Costello E, Erkanli A. Comorbidity. *J. Child Psychol. Psychiatry*. 1999; 40: 57-97
7. Serra-Pinheiro MA, Schmitz M, Mattos P, Souza I. Oppositional defiant disorder: a review of neurobiological and environmental correlates, comorbidities, treatment and prognosis. *Braz J Psychiatry*. 2004; 26:273-6.
8. Kadesjo C, Hagglof B, Kadesjo B, Gillberg C. Attention-deficit hyperactivity disorder with and without oppositional defiant disorder in 3- to 7-year-old children. *Dev Med Child Neurol*. 2003; 45(10):693-9.
9. Loeber R, Burke JD. Developmental Pathways in Juvenile Externalizing and Internalizing Problems. *J Res Adolesc*. 2011; 21(1):34-46.
10. Granero R, Louwaars L, Ezpeleta L. Socioeconomic status and oppositional defiant disorder in preschoolers: parenting practices and executive functioning as mediating variables. *Front Psychol*. 2015; 24(6):1412.
11. Noordermeer SD, Luman M, Oosterlaan J. A systematic review and meta-analysis of neuroimaging in oppositional defiant disorder (ODD) and conduct disorder (CD) taking attention-deficit hyperactivity disorder (ADHD) into account. *Neuropsychology review*. 2016; 26(1):44-72.
12. Burke JD, Loeber R, Birmaher B. Oppositional defiant disorder and conduct disorder: a review of the past 10 years, part II. *J Am Acad Child Adolesc Psychiatry*. 2002; 41(11):1275-93.
13. Loeber R, Lahey BB, Thomas C. Diagnostic conundrum of oppositional defiant disorder and conduct disorder. *J Abnorm Psychol*. 1991;100:379-390
14. Cohen P, Flory M. Issues in the disruptive behavior disorders: attention deficit disorder without hyperactivity and the differential validity of oppositional defiant and conduct disorders. In: *DSM-IV Sourcebook*, Vol 4, Widiger T, ed. Washington, DC: American Psychiatric Press; 1998: 455-463.
15. Cavanagh M, Quinn D, Duncan D, Graham T, Balbuena L. Oppositional defiant disorder is better conceptualized as a disorder of emotional regulation. *J. Atten. Disord*. 2017; 21(5):381-9.
16. Anderson NE, Kiehl KA. The psychopath magnetized insights from brain imaging. *Trends Cogn Sci*. 2012; 16(1):52-60.
17. Loeber R, Burke JD, Lahey BB, Winters A, Zera M. Oppositional defiant and conduct disorder: a review of the past 10 years, part I. *J Am Acad Child Adolesc Psychiatry*. 2000; 39(12):1468-84.
18. Burke J D, Loeber R, Birmaher, B. Oppositional defiant disorder and conduct disorder: a review of the past 10 years,



- part II. *J Am Acad Child Adolesc Psychiatry* 2002; 41(11): 1275–1293.
19. Hamilton S S, Armando J. Oppositional defiant disorder. *American Family Physician*. 2008; 78(7): 861–866.
 20. Kivumbi A, Byansi W, Damulira C. *et al*. Prevalence of behavioral disorders and attention deficit/hyperactive disorder among school going children in Southwestern Uganda. *BMC Psychiatry* 2019; 19(1):1-8.
 21. Disruptive Behaviour Disorder Rating Scale (DBDRS); <https://www.psychtools.info/dbdrs>/<https://www.psychtools.info/dbdrs/>
 22. Van Haselen RA. Homeopathic clinical case reports: Development of a supplement (HOM-CASE) to the CARE clinical case reporting guideline. *Complement Ther Med*. 2016;25:78–85
 23. Moorthi SK, Radhika P. Homeopathic Management of Conduct Disorder: A Case Series. *Homœopathic Links*. 2021; 34(03):241-8.
 24. Revathi TR. *A Study on Homeopathic Management of Oppositional Defiant Disorder in Children* (Doctoral dissertation, Sarada Krishna Homeopathic Medical College, Kulasekharam).
 25. Rothenberg A. Oppositional Defiant Disorder. *Homœopathic Links*. 2009; 22 (04):184-9.