



## A Case Report of the Treatment of Oppositional Defiant Disorder (ODD) in a Non-Specialist, Resource-Limited Environment Using the Co-Care Approach

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### Abstract

As the incidence of Oppositional Defiant Disorder (ODD) continues to grow, non-specialist mental health providers, particularly those in rural and remote areas, where access to mental health services are limited, will be increasingly called upon to treat this disorder. This will be particularly true for general practitioners, family physicians, paediatricians, mid-level providers and others, given the relative scarcity of clinical psychologists, psychiatrists, and mental health providers in such settings. It is important for non-mental health specialists to recognise and have a basic understanding of how ODD can be treated in such settings. As such, this case report presents a typical ODD patient in such a setting, and details the course of the successful treatment of the patient using a variety of approaches, including parent-child interaction training, family therapy, social skills training, problem solving training in a co-care arrangement with a specialist mental health provider.

**Keywords:** Oppositional defiant disorder; Mental health; Resource-limited environment; Psychology; Psychiatry; Parent-child interaction training; Family therapy; Social skills training; Problem solving training

**Abbreviations:** ODD: Oppositional Defiant Disorder; ADHD: Attention Deficit Hyperactivity Disorder; ADD: Attention Deficit Disorder; GP: General Practitioner

### Introduction

Oppositional Defiant Disorder (ODD) falls under the umbrella of Autism Spectrum Disorder, which also

includes Asperger's Syndrome, Autism, and Pervasive Development Disorder Not Otherwise Specified. Manifesting as a consistent pattern of behaviour which can be described as angry, irritable, and defiant, ODD also includes nonaggressive behaviour which is purposeful and directed in a vindictive manner at parents and other authority figures. While it is not fully understood why, the incidence of ODD is increasing in the general population [1]. Such could be associated with increased diagnosis, as more providers become aware of the symptoms of ODD, and hence diagnose the disorder more frequently; or such could be associated with increases in socio-cultural exposure, such as defiant media and peer influences, that interacts with the specific environment in which the child is living to create the symptoms of ODD.

Regardless of the underlying aetiology of ODD, such represents an increasing diagnosis in both urban and rural areas in developed and developing settings, with the result being that a wide-range of providers will now be presented with patients who meet the diagnostic criteria for ODD. For those providers working in resource-limited environments, such as rural and remote communities, where access to specialist mental health providers is limited or non-existent, there is a need to both understand the diagnostic criteria for ODD, as well as to be able to provide frontline treatment for such to both patients and families. Ideally, this would be done as a system of co-care, in which the primary provider in the remote community has access to specialist mental health support.

## Medical Presentation and Treatment Strategies

Common symptoms of ODD with which the patient may present include refusing to accept responsibility for their actions; verbal and sometimes physical hostility towards others, but particularly authority figures such as parents, caregivers, and teachers; an ongoing and pervasive refusal to comply with direction or rules, regardless of the stage of development in understanding the purpose of such; easy annoyance resulting in anger; and refusal to compromise; and lack of respect for authority. It is not uncommon to find co-morbid diagnosis of Attention Deficit Hyperactivity Disorder (ADHD) or Attention Deficit Disorder (ADD) [1,2].

The treatment of ODD involves an integrated approach that almost always involves family and caregivers, and to a lesser extent teachers when possible. One of the main reasons for the involvement of the family is to both address any underlying issues within the family that may

be contributing to the ODD behaviour, but also to help other members of the family, such as siblings, cope better with the ODD behaviour [1,3]. There are four mainstays to the treatment of the ODD patient that providers in rural and remote communities should be familiar with, and which under the direction of a specialist mental health provider located at a distance, but with whom there is a co-care arrangement, can provide. These include parent-child interaction training; family therapy; social skills training; and problem solving training [2,4].

Parent-child interaction therapy involves coaching of the parents during observed interactions with the child who has been diagnosed with ODD [4]. While traditionally this would involve the therapist communicating with the parent via an earpiece from behind a one-way mirror, this is not always possible in resource-limited environments; thus, resulting in providers being present in the room with the parent and child, providing support for both parent and child in their interactions. The end-goal of such an approach is to help the parent develop more effective parenting strategies to dealing with the oppositional symptoms of ODD [5].

Family therapy involves working with parents and children to help develop communication skills to address issues related to both the ODD, as well as any underlying issues which may be contributing to an environment where defiant behaviour is encouraged or possibly even rewarded by one parent over the other [4,5]. Problem solving training works directly with the child to help them identify ways in which to address the underlying anger and anxiety that are leading to the ODD behaviour [3]. By so doing, the child is changing the paradigm of their thinking relating to their behaviour, and adopting a new approach to solving those problems which would have otherwise led to oppositional behaviour [6].

Social skills therapy involves working with the ODD patient to learn how to positively interact with family and peers [4]. In so doing, the child learns how to relieve anger in a socially acceptable manner, as well as control their temper, through the use of better communication techniques, role play, and positive reinforcements for behavioural change at home, school, and elsewhere [7]. Reinforcement has several positive benefits, including increased self-esteem at being able to control one's behaviour resulting in rewards, and as a means to focus the child on a task related to improved behaviour, such as in school work [5]. Positive reinforcement can take the form of social praise and recognition, such as hugging or smiles, rewards such as toys or food, or tokens that can be exchanged for money or other benefits, which has been shown to be very successful with teenagers [3,5]. The

child, parents, teachers, and the provider should work together to develop a plan for reinforcement.

Regardless of the particular mix of therapeutic approaches and positive reinforcement, the end goal is the same, to alter the behaviour of the child, as well as the family in those instances in which the family is engaging in reinforcement of negative behaviours, so as to allow the child to better function at home, school, and in other social settings, and thus improve their quality of life, and potential for long-term social success.

### Case Presentation

N is an eleven-year-old male who presented to the general practitioner (GP) in a resource-limited environment where there are few mental health providers in the Pacific. N's family were expatriates who had moved for the father's work, while N's mother stayed at home caring for N and his three additional brothers. N was a full-term child who experienced a normal vaginal delivery. As a child, he met the normal developmental milestones, and seemed to have a particular closeness to his mother, always wanting to be in close contact with her, and enjoying her attention. As N grew, he became increasingly strong-willed, and refused to perform simple tasks at the request of his father or mother, such as cleaning his room, putting on pyjamas, or brushing his teeth. N's parents described this behaviour as purposeful, almost as if N were doing so intentionally to irritate them.

Around age five N began to have frequent temper tantrums when asked to undertake simple tasks, with these tantrums being worse in public. This behaviour was mirrored at school when N became school aged, where N showed wilful disobedience to his teachers, and occasional hostility to other children, which seemed to be specifically aimed at annoying others. At the time, his parents stated they felt this was simple developmental behaviour that N would grow out of, despite poor performance in schooling, and concerns being expressed by teachers and school counsellors, and the recognition that N's behaviour was purposeful. Upon presentation to the GP at age eleven, these tantrums in school, home, church, and in public continued.

When N's family moved overseas for father's work, N's behaviour become exacerbated when he was enrolled in a local school where he was one of only a handful of expatriate children. At this time, N was referred to an expatriate GP who was familiar with the family. The GP spent time interviewing the family, and in particular N's parents, N's teachers, and finally N himself.

Observing the interactions between N and his family, the GP noted that while both parents initially tried to make N comply with requests, that his mother was more forceful in doing so, and that the father seemed to wither under N's outbursts and withdraw into himself, refusing to acknowledge N's behaviour, or assist N's mother in disciplining him. At times, the father even criticised N's mother for her attempts to control N. N's father was frequently absent from the home for work, as well as to experience the foreign country in which he was now living, and N's mother reported that while she felt considerable anger towards the father for spending so much time away from the family, that N's behaviour was somewhat improved when the father was not present. N's siblings exhibited a particular deference to N's behaviour, rarely challenging his outbursts and demands, and often times being asked by N's parents to take over those chores which N refused to do, such as cleaning up toys, thus further enabling the situation. It was also observed that there were few rules in the home, such as bedtimes, homework schedules, chores, and so forth, and that in many ways the home was in a constant state of chaos that revolved around meeting the immediate crisis of the day, both in terms of N's behaviour, as well as daily tasks, such as food preparation, as opposed to any sort of planning.

The GP also took the opportunity to speak with N's teachers as well as briefly observe N in the classroom. N's teachers stated that they were concerned with his behaviour, that he was a "cheeky child," who did not behave no matter what approach they took with him and that he was frequently angry in class towards both teachers and fellow students. Consequently, N's grades were very poor. During recess and lunch breaks, N failed to interact with the other children and appeared to have few friends. Despite apparent anger, N never did engage in physical violence towards his teachers or schoolmates. At church, N continued to exhibit the same types of angry, defiant behaviour seen at home and in school.

When the GP spoke with N, he found that N seemed to have difficulty holding still, was easily distracted, thus suggesting a possible co-morbid diagnosis of ADD or ADHD. Furthermore, N was easy to anger when asked about his family and relationships with his parents and siblings. N refused to sit still even when repeatedly prompted by the GP. N expressed anger at living overseas, his school, and lack of friends, repeatedly stating that he "wanted to go home," despite the fact that he revealed he had few friends in his home country either. During this interview, he failed to make eye contact, and often times refused to answer questions. However, the GP was unable to explore such, as N became angry and left the interview early.

## Management and Outcome

Based upon the presentation, observations, and interviews, the GP diagnosed N with ODD, and contacted a former colleague who was a consultant clinical psychologist who was not located in the same country as the GP, regarding co-care of N, since there were no specialist mental health providers available locally. The consultant clinical psychologist agreed to assist in the co-care of N, given that the GP had also undertaken limited training in mental health counselling in the past. This is an important point for consideration, or that it is possible for GPs and other providers to receive targeted mental health training that will allow for the co-care of ODD and other patients in such limited environments. The resulting co-care plan would focus on parent-child interaction training, family therapy, and social skills training, and problem solving training as an integrated approach. It was decided based upon the history of N's family, and his observed interactions with parents, and in particular the manner in which N's father responded to the oppositional behaviour, that incorporating the parents into the treatment would be critical to its success.

N met with the GP two times a week for a period of four weeks for one hour at a time. The GP also met with the parents, but not the siblings, one time per week for four weeks for an hour at a time. Before each meeting the GP reviewed the case notes and objectives for the sessions with the consultant clinical psychologist who was providing the co-care arrangement. The consultant clinical psychologist also provided training sessions via video conference, articles, and textbook chapters to the GP to help up skill him in the various treatment regimens for ODD. Following each treatment session, the GP would provide a written summary, conclusion, and recommendations for the next treatment session to the co-care consultant clinical psychologist, who would then critique, modify as necessary, and approve moving forward with additional goals for the next sessions.

The intensive parent-child interaction training was combined with social skills training and problem solving training in each session, and generally focused on sessions in which both N and his mother were present together, given N's father being unable, or possibly unwilling to attend, do to purported conflicts in scheduling. During these sessions, the focus was on how N and his mother could communicate and express their love, while also expressing the anger emotions that were resulting in the oppositional behaviour, towards one another. While N struggled with this at first, within the second week of sessions, N began to become more open in expressing his

love towards his mother, but also expressing his anger at their social situation as strangers in a foreign country, limited friends, strange foods, as well as anger towards his father who was frequently not present in the home both in the new country, as well as prior to their move overseas. N's mother became more willing to express her anger and frustration towards N's behaviour by explaining how it made her feel towards him; to which N was initially angered, but by the beginning of the third week, he was able to accept and express an understanding that this anger and frustration expressed by his mother was a direct outcropping of his own behaviour, and that the solution to such was not additional anger, but better behaviour and expressions of feeling through words as well as drawings. It was further focused that in order to make friends, and to learn about the new culture, and even enjoy it, that N would need to change his behaviour, and anger towards those around him in school, public, and church.

Both N and his mother were encouraged to keep a journal and to engage in artwork as a private means of expressing anger and anxiety, as opposed to exhibiting anger openly. N more frequently drew his feelings, which he could then explain to his mother and the GP, as well as to his father, siblings, and teachers on occasion. While his mother more frequently wrote her feelings. N's behaviour at home and school began to improve as he found new outlets for expressing his frustration towards his parents, siblings, and other authority figures. Frequent role playing sessions helped N develop the skills he needed to defuse potentially aggressive situations, and focused on family life, school, church, and interacting appropriately in public. Sometimes the GP would play the role of a family member or teacher while mother watched, and at other times the GP and the mother would role play appropriate activity while N watched. Mother reported that N actively began asking his siblings to role play with him at home on occasion, as well as teaching them about expressing their feelings in drawings. It should be noted that only once did N's father attend a session with N and his mother, and his involvement was limited.

A system of positive reinforcement was also developed whereby positive behaviour would result in rewards. It was determined that N would earn points for every day that he went without having an inappropriate outburst of oppositional defiance in school, at home, in public, and in church. N could then exchange these points for money, treats, time alone with his mother, and other commodified items identified by N and approved by his mother. Again, father showed little involvement in this commodification reward system, which angered N's mother.

In regard to parental therapy, it was determined that such would focus on the parents alone, with the hope that as N improved his own behaviour at home, and the parental relationship improved, so would the situation for N's siblings. There was clear anger between N's parents that stemmed from years of what mother described as father's active decision to ignore his family in deference to his own needs. The parental therapy between mother and father was much less successful as that between N and his mother. N's father was seen by his mother as not being interested in his family, even selfish, in putting his own needs and desires above that of the family and his wife. Conversely, N's father felt that the mother was at times too strict, and that she did not understand his own desire to have time away from the family for his own personal and "spiritual" development. Despite having met for all four of the agreed upon sessions, both the GP and the consultant clinical psychologist agreed that little improvement had been made in terms of the parental relationship; but that despite this, N's behaviour had improved, as noted by both his mother, his siblings, his teachers, and other adults close to the family. It was agreed by all parties involved that N's treatment had been successful, but that there was still much work to be done in terms of social training for N, such as how to make friends and engage better in social circumstances.

Unfortunately, as mentioned above, treatment only went on for four weeks before N's family made the decision to move back home to the country from which they came. This decision was based on a combination of factors, including dissatisfaction with living arrangements and employment in the host country, and so forth, primarily on the parent of the father. Both parents expressed their happiness with the improvements that N had made, and stated they would seek out someone who could continue to provide the treatments following their move. Follow-up, however, revealed that they did not do so, and many of the symptoms of ODD had returned; although both mother and father stated that they were not nearly as bad as they had been before the move to the foreign country, and during the time in the foreign country. Additional follow-up with the parents revealed that many of the marital and family stress issues they had been experiencing also returned upon moving back to their home country, and that at the time of case report, they had not sought out specialist marital counselling assistance.

## Conclusion and Recommendations

This case report demonstrates the successful treatment of ODD in a resource limited environment using co-care principles that pair a local primary care provider with a

specialist mental health provider to co-manage a patient. It is important for GPs and other providers who may encounter ODD patients in resource limited environments to have an understanding of how to diagnose and treat such, but in concert with specialist mental health providers in a form of co-care, even if those providers are not physically present in the treatment environment. Such distance supervised co-care has great potential for allowing ODD, as well as other developmental issues, to be treated in the communities in which patients live, thus reducing the stress and anxiety associated with travelling for treatment; or, which is more common, simply failing to obtain treatment at all, leading to lifelong adjustment and social issues that are more difficult to treat in adulthood.

Given this, GPs should actively seek to formulate referral and co-care arrangements with specialist mental health providers, who can provide distance supervision and specialist support in the treatment of ODD patients. GPs and others should also avail themselves of online and distance-based training opportunities that will allow themselves to become up skilled in the mental health services they can provide under appropriate supervision. Given the rising rates of ODD, as well as other forms of conduct disorders, and mental health issues, and the ongoing mal-distribution of specialist mental health providers, it is critical that GPs and other become better versed in how to diagnose and treat these populations, both for the immediate care that can be provided one-on-one, but also in terms of addressing the growing epidemic of mental health issues that impact both urban as well as rural and remote communities where access to mental health may simply not be present, but where the burden of disease is highest.

Given this, co-care has both clinical as well as public health benefits that both providers and service planners should consider. Researchers should actively look at the efficacy as well as financial sustainability of such co-care arrangements, given the time commitment required by GPs and others to provide co-care to ODD and other mental health issues in their home communities.

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