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Medication and Conduct Disorder: Professional's Perceptions of its Helpfulness

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**MEDICATION AND CONDUCT DISORDER:
PROFESSIONAL'S PERCEPTIONS OF ITS HELPFULNESS**

by

Deann L. Reese

A Thesis

Submitted to the Graduate Faculty

of

Augsburg College

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for the Degree of

Master of Social Work

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To my husband,
who made this possible,
all my love.

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Thank you Kevin, for taking care of our son, the house, and our messy little life throughout this whole process.

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ABSTRACT OF THESIS

MEDICATION AND CONDUCT DISORDER: PROFESSIONAL'S PERCEPTIONS OF ITS HELPFULNESS

METHODOLOGY: RESEARCH

DEANN REESE

April 25, 1999

This study explores the use of medication to treat children diagnosed with conduct disorder. The use of medication to treat this disorder is a controversial issue, and one that has been well researched in inpatient settings by psychiatrists. However, parents of these children and social workers serving these families need to be informed of its usefulness on a basis that can be applied to other settings, since many of these children are discharged from inpatient settings back into their families and original communities. This study surveyed 7 staff of a behavioral health unit where children diagnosed with conduct disorder were being treated. The survey used consisted of items borrowed from the Conners' Rating Scales, as well as questions of this researcher's own design (Conners, Sitarenios, Parker, and Epstein, 1998). Findings indicated that children most likely benefited from the inpatient environment and treatment rather than medications. The implications for practice are also outlined and include the importance of social workers being informed about interventions that are most effective in the treatment of this disorder.

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CHAPTER I

Introduction/Research Question

This research explores the use of medication in the treatment of children diagnosed with conduct disorder from a professional social work perspective. How to treat conduct disorder has been acknowledged as somewhat of a mystery. Several studies have been conducted on the effects medication has on children diagnosed with conduct disorder being treated on an inpatient basis, but they offer little or no information for parents or professionals working outside of that setting. There have also been several other studies exploring non-medicated options in treatment for this disorder like Malone et al., 1997. However, none of the studies considered the effects of medication in conjunction with other services. It has always been a professional commitment of social work to consider the whole family in treatment, and Cordoba, Wilson and Orten (1983) write "it is important to the welfare of individuals with mental and emotional problems that social workers have a basic knowledge of psychotropic medications and their use, even though social workers do not themselves prescribe the drugs" (p. 448). DeChillo (1993) also speaks of the importance of collaboration between social workers and families of patients with mental illness and disorders like conduct disorder. Therefore, this thesis will inform social workers about the role medication may play in a family with a child who is diagnosed with conduct disorder.

Some studies involve treatment for conduct and oppositional defiant disorder, and attention deficit hyperactivity disorder (ADHD). Overall, there are several techniques evaluated, some involve medication, while others use different techniques to alleviate the problems associated with conduct disorder, such as, social skills training, family therapy and parent management training.

In this researcher's experience it has become evident that many parents are wary of putting their child on prescription drugs for his or her mental or emotional disorder. In a study researching medication and attention deficit hyperactivity disorder, twenty percent of the parents who had agreed to give their child the medication being tested for the duration of the study, had discontinued giving the drug by the fourth month and forty-four percent had discontinued by the tenth month (Firestone, 1982).

This research aims to add to the knowledge of effective treatments of this disorder, by examining professional's perceptions of children being treated with medication on their unit. This researcher examined several theories in relationship to this issue such as: systems theory, behavior models and social learning theory, psychodynamic models and attachment theory. Also presented is the research of the effects medication has on the disorder, as well as other types of interventions. However, this researcher's main interest lies with **how**

the professionals working with children diagnosed with conduct disorder perceive the use of medication in that child's treatment. In what ways do professionals find medication helpful in the treatment of a child diagnosed with conduct disorder? What other interventions are helpful?

The following chapters review the literature on conduct disorder; its treatments and theories, and provide the theoretical/conceptual framework for the study. Also presented are the study's methodology, and findings, as well as a discussion of those findings and the implications for practice. A glossary further explaining the medications discussed can be found in Appendix F.

CHAPTER II

Literature Review

Johnson (1989) asserts that severe emotional disturbance in child and adolescents are a national problem that requires immediate attention from social workers. Estrada and Pinsof (1995) state that the most frequently occurring child behavior disorders are conduct problems. They also state that over the last decade the prevalence of conduct disorder among children has increased. Boys are two to three times more likely than girls to manifest conduct disorder behavior. The American Psychiatric Association (1994) defines conduct disorder as “a repetitive and persistent pattern of behavior in which the basic rights of others or major age-appropriate societal norms or rules are violated, as manifested by the presence of three (or more) of the following criteria in the past 12 months, with at least one criterion present in the past 6 months:” aggression to people or animals, destruction of property, deceitfulness or theft, and serious violations of rules (p. 66). For a complete description of the diagnostic criteria for conduct disorder, please see appendix A.

Aggression is a symptom of conduct disorder. Much of the research on conduct disorder involves how to effectively treat aggression and antisocial behavior in children. This section will look at conduct disorder and the theories surrounding the disorder. It will also explore the effect medication has on the disorder as well as other types of causes and interventions of conduct disorder.

Theories/Models

Control Systems theory.

Lytton (1990) has suggested that control systems theory is one possible explanation for the disorder. He stated that in applying this theory, both parent and child are sensitive to the behavior of the other and have certain tolerance levels for one another. Essentially what Lytton suggests is that in ordinary children parental influence is quite strong, but not in children diagnosed with conduct disorder. The child and parent engage in reciprocal relations, and the child is eliciting parental responses that are in turn having further effects on his or her development. With children diagnosed with conduct disorder this interaction is actually contributing to the development of the disorder. Using this theory, treatment would include an attempt to change the reciprocal relations to foster a healthier development of the child. For example, instead of yelling at the child for his or her behavior, the parent would change his or her response to holding the child's hand. The child, instead of yelling back at the parent, may respond by simply standing close to the parent.

This theory is related to the theory used in this research, systems theory, which is described in detail under the theoretical framework section of this paper.

Behavior models and social learning theory.

Estrada and Pinsof (1995) write of family therapy and social learning theory in their research stating that the two theories bring a strong psychosocial emphasis to the treatment of children with emotional and behavioral problems.

They believe the entire family should be treated and not just the individual who has the disorder. Applying social learning theory, the child may be modelling behavior of others in the family. That is, the child may be repeating a behavior according to an idea they have formed about the behavior, after observing someone else performing an action (Payne, 1991). Considering behavior models in general, others in the family may be positively reinforcing the negative behavior of the conduct disorder child; essentially making it more likely that the negative behaviors will continue through their actions or responses or lack thereof.

Psychodynamic models and attachment theory.

Attachment has been described as: “an experience, an emotional relationship, and affectionate bond” which includes a “basis for trust and results in feeling that the other person can never be replaced” (Finnell, 1996, p. 1).

This researcher has experienced first hand those who are using psychodynamic models and attachment theory in their work. In this writer’s field experience at Children’s Home Society (CHS) in Sioux Falls, South Dakota, it was found that professionals, including psychologist, social workers and child care counselors, believe strongly in attachment theory in their work with children diagnosed with conduct disorder. Applying this theory to the disorder, one could state that the conduct disorder child, suffers his/her symptoms because he/she did not bond properly with anyone as an infant. That is, his/her needs were not met so he did not receive relief (eye contact, touch, lactose, smiles) from the

experience of rage or fitful crying, which would include feelings of helplessness, hopelessness, and anger, and did not build trust with anyone (Children's Home Society, 1998). Nelson (1998) states that crying is an inborn attachment behavior that is primarily an appeal for the presence of a protective figure, namely, a parent.

Theraplay is a model used at CHS. Its aim is to create an active and affective connection between the child and the caregiver. This model focuses on five essential qualities of parent-child relationships: structure, challenge, intrusion, nurture and playfulness (The Theraplay Institute, 1996).

Treatment

The following section explores the literature on the effects of medication on conduct disorder. Many different medications that have been studied are discussed and are included such as: lithium carbonate, carbamazepine, propranolol, Prozac, Buspar, Dexedrine, Ritalin, and pemoline. (Please refer to Appendix F for a more detailed description of the medications presented in this chapter.) This section also looks at other types of treatment currently being used and discussed in the literature.

Effects of medication

Rifkin et al. (1997) examined the effects of lithium carbonate for treating adolescents with conduct disorder. They administered lithium for two weeks to fourteen subjects who were patients on a psychiatric ward, while administering a placebo to a control group of twelve adolescents. Their results failed to support a

difference between the group receiving the lithium and the one receiving the placebo in the treatment of conduct disorder. However, Cueva et al. (1996) state in their research that lithium was shown to have antiaggressive properties. Cueva et al. explored the effects carbamazepine had in aggressive children with conduct disorder. Cueva et al. argue that not all children are “lithium responders” and carbamazepine is a safe drug with antiaggressive properties as well. Subjects for their study included children, age five to twelve, diagnosed with conduct disorder. “Following a 2-week placebo baseline period, children who met the aggression criteria were randomly assigned to treatments for 6 weeks; the study ended with a 1-week posttreatment placebo period” (Cueva et al., p. 480). However, their results did not find carbamazepine to be superior to the placebo in reducing aggression in the children they studied, but they did have this information in their discussion:

The results were more promising in a pilot study of carbamazepine involving 10 hospitalized children who had a similar behavioral profile and using the same assessment instruments (Kafantaris et al., 1992). The pilot study was open, placebo and randomization were not used, and therefore bias was not reduced which could explain the positive results. In addition, in the pilot study four of the responders to carbamazepine had failed previously to respond to lithium. Perhaps in future studies the effects of carbamazepine should be assessed in nonresponders to lithium (Cueva et al., 1996, p. 485).

Cueva et al. (1996) also found carbamazepine to have a number of side effects, such as: leukopenia, rash, dizziness, and diplopia.

Mirza, Michael and Dinan (1994) write of carbamazepine in the treatment of conduct disorder in their overview, but they also mention propranolol as possibly being useful in the treatment of aggressive behaviors as does Newcorn and Halperin (1990). Newcorn and Halperin also suggest that fluoxetine (Prozac) and buspirone (Buspar) are likely to be researched in the future regarding their effects on the disorder. Mirza, Michael and Dinan also note that in controlled trials of methylphenidate, more commonly known as Ritalin, and dextroamphetamine, more commonly known as Dexedrine, results show both drugs may be effective in reducing mild forms of aggression.

Ritalin and Dexedrine are two drugs commonly used in the treatment of ADHD. Riggs, Thompson, Mikulich, Whitmor, and Crowley (1996) suggest that ADHD may contribute to the severity and persistence of antisocial behaviors. Their study involved thirteen male adolescents with conduct disorder, substance use disorders and ADHD. All subjects were living in a residential facility at the time of the study, receiving treatment for their substance use. Riggs et al. treated the patients with a drug called pemoline, which they found "may be a promising medication for the treatment of comorbid ADHD in adolescents with conduct disorder and substance use disorder" (p. 1022). Riggs et al. also state that this drug may enhance the child's "ability to utilize and progress in the programmatic aspects of their substance and behaviorally focused treatment.

However, without a comparison group, this is a speculative point and in need of further investigation” (p. 1022). Mirza, Michael and Dinan (1994) caution us however, by stating children diagnosed with conduct disorder without the features of hyperactivity are unlikely to respond to stimulate medication.

Yet another study by Malone et al. (1997) explored a nonpharmacological response to children with conduct disorder who were hospitalized for chronic and severe aggression. During their four week placebo-controlled study, using subjects meeting a specific aggression criterion, they found that almost half of the forty-four enrolled subjects, “while taking no active medication, benefited from the inpatient milieu/structure and/or placebo” (Malone et al., p. 242). This researcher believes this speaks volumes about the role environment plays in these children’s lives. Malone et al. argue that these findings are very important stating; “Medication to treat aggression should not be initiated immediately upon hospitalization because improvements associated with hospitalization may be attributed inaccurately to pharmacotherapy, resulting in unnecessarily medicating children” (p. 242). Malone et al. also note in their research that there is a pressure to decrease the rate of psychiatric hospitalization and the length of stay for those who are hospitalized. They believe this leads to increased unnecessary administration of medication and state; “It is essential to have a placebo baseline period so that baseline responders can be excluded from entering the treatment

period of study. By having a baseline period, one may avoid prescribing medication to children where this is not indicated" (Malone et al., p. 246). Malone et al. bring up another valid point in their research stating the importance of determining whether the aggressive behavior returns and acknowledging that they do not know what would happen if the children would be returned to the same home environment they came from. This is important to note for social workers working with these families. As Franklin (1992) points out, social workers need to act as educators, to help others working with the child to understand the child's needs.

Other types of causes/interventions

Newcorn and Halperin (1990) state: "Pharmacotherapy alone does not constitute an adequate treatment program for children with conduct disorder. As with ADHD children, individual, family, and group psychotherapy are frequently indicated. Special school placement may also be required" (p. 6). Franklin (1992) conveys that without intervention, many of the students with a diagnosis like conduct disorder will drop out of school. She also states that when working with children with conduct disorder, social workers need to use a wide range of interventions to be effective ranging, from psychosocial assessments to advocacy.

Paternite, Loney, and Roberts (1995) write of conduct disorder in their research stating that it has been increasingly viewed as involving family interaction and behavioral problems. This would suggest such a technique as

“parent management training”, would be effective in combating this disorder.

Kazdin (1997) states “parent management training” (PMT) refers to treatment procedures in which parents are trained to alter their child’s behavior at home (p. 1349). Kazdin notes that PMT has been applied to many childhood problems and populations including conduct disorder.

Kazdin (1997) states PMT has two influences. One is operant conditioning, which describes and explains how behavior can be acquired and influenced by a variety of stimuli and consequences. The other is the research over the years that has shown the importance that the role parent discipline practices play on their child’s aggressive behavior. Kazdin writes:

Parental attention to deviant behavior, interactions in which increasingly aggressive child behavior is reinforced, inattention to prosocial behavior, coercive punishment, poor monitoring of child activities, and failure to set limits, referred to as inept discipline practices, unwittingly develop and exacerbate aggressive child behavior” (p. 1349).

Kazdin (1997) states overall, the research has “found that parenting practices play a significant role in the development and amelioration of aggressive and antisocial behavior” (p. 1349).

“Antecedents, behaviors, and consequences, sometimes referred to as the ABC’s, are key ingredients of PMT and are used to alter behaviors of the parent and child” (Kazdin, 1997, p. 1350). Kazdin (1997) writes about how to implement the ABC’s effectively and states; “Initial programs are temporary and

can be gradually reduced (faded) and eliminated so that behaviors are maintained and transferred to a setting other than the home" (p. 1350).

The outcomes of studies testing PMT have led to the following conclusions:

*PMT has led to marked improvements in child behavior on parent and teacher reports of deviant behavior, direct observation of behavior at home and at school, and institutional records (e.g., school truancy, police contacts, arrest rates, institutionalization).

*The magnitude of change has laced conduct problem behaviors to within nonclinic levels of functioning at home and at school, based on normative data from nonreferred peers (e.g., same age, sex).

*Treatment gains have been maintained in several studies 1 to 3 years after treatment, although one program reported maintenance of gains 10 to 14 years later (Long et al., 1994).

*Improvements in child behaviors not directly focused on in treatment, improvements in behaviors of siblings at home, and improvements in maternal psychopathology, particularly depression, have also been documented. Occasionally, marital satisfaction and family cohesion improve after treatment, but data on these outcomes are sparse (Kazdin, 1997, p. 1351).

Kazdin (1997) notes that children with conduct problems and their families often have multiple problems and suggest supplementing PMT with sessions that address parent and family stressors and conflict when necessary.

Many other researchers speak of PMT, such as Diamond, Serrano, Dickey, and Sonis (1996). They also discuss functional family therapy. In this therapy the child's behavior is believed to be serving a psychological function in the family so rather than focusing on the child's negative behavior, the therapist focuses on reorganizing family relationships so that individual needs are met in more constructive ways (Diamond et al., 1996).

Diamond et al. (1996) also cite Hengeler and colleagues for developing a home-based treatment called Multisystemic family therapy. This therapy integrates knowledge of both child development and cognitive-behavioral techniques into a family-based approach. Diamond et al. also state: "family-based treatments have also augmented the effectiveness of well-established individual and group treatments" (p. 11).

Abikoff and Klein (1992) also discuss PMT in their research, but also mention two other major classes of behavioral intervention, social skills training and community-based programs. Although they state that these offer little promise for those children suffering from severe conduct disorder.

In looking at treatment from a school's perspective Gerten (in press) states that interventions need to do the following: 1) address biological

characteristics of the child, 2) be multimodal, 3) be multisystemic, 4) focus on prosocial peers and 5) include cognitive processing.

Summary

This chapter has explored the literature on conduct disorder. There are many drugs currently being researched to combat the aggressive symptoms of conduct disorder. Many of the studies dealt with lithium, carbamazepine, Ritalin or Dexedrine. However other drugs such as pemoline are being studied as well. While still others are sure to draw more attention in the future such as: propranolol, Prozac, and Buspar. However, this researcher believes as many other researchers do such as Steiner and Dunne (1997) and Abikoff and Klein (1992) that treatment of this disorder should come from multiple domains like PMT, family counseling, community based programs, and school interventions, and not rely solely on medications. Social workers are part of these programs, and as advocates for these children and their families, it is important for the social work profession to be informed of the most effective treatments and most helpful aids in dealing with a diagnosis like conduct disorder.

It is apparent that there are some gaps in the research as Steiner and Dunne (1997) state: "Antidepressants, lithium carbonate, carbamazepine, and propranolol currently are used clinically for conduct disorder, but rigorous scientific studies to demonstrate their efficacy have not been done" (p. 3). It also appears that most research conducted has been on children in hospitals or residential settings and the data collected was from doctor's observations of the

children. Previous studies have not consider other factors that may be helpful for parents and professionals to know when working with these children and their families, such as; what areas of the child's life is most effected when taking the medication (home, school, or community), and is the family utilizing any other type of service that may be alleviating symptoms of the disorder. Therefore, the purpose of this study is to bridge the gap between hospital and residential settings to home-life and those children and their families who will eventually be seen in outpatient clinics and other settings by social workers and other professionals in the community. That is why it is important to know in what ways is medication helpful in the treatment of conduct disorder, and what other interventions are most helpful in the treatment of this disorder.

CHAPTER III

Theoretical/Conceptual Framework

While the focus of research on conduct disorder has been related to drug treatments and interventions, there are theories that may foster our understanding of the disorder and allow us to look at things from a different perspective. This thesis deals mainly with systems theory. Payne (1991) explains social work's use of systems theory originated from general systems theory, which proposes that "all organisms are systems, composed of sub-systems that are in turn part of super-systems" (p. 135). The basic concepts Payne describes that make up system theory are as follows: a) a system is an entity with boundaries where a physical and mental energy is exchanged within and across the system's boundaries, b) a closed system is one without interchange across the boundaries, c) an open system is one where exchange takes place or energy crosses the permeable boundary.

How energy is used in a system is described as throughput, while how it maintains itself by receiving and using the energy inputted is described as its steady state. Entropy is the tendency of systems to use their own energy to keep going, and unless they receive inputs from outside the boundary, they will lose energy and die (Payne, 1991). In systems theory, systems are viewed as nonsummative that is "the idea that the whole is more than the sum of its parts" or that a family is more than just its members but, as a whole, a unit (Payne, p.

136). Payne states; “systems may possess synergy which means that they can create their own energy to maintain themselves” (p. 136). Payne uses the following as an example; “human beings interacting in a marriage or in a group often stimulate each other to maintain or strengthen relationships which build up bonds within the group and make it stronger; this is an example of nonsummativity, because these bonds could not be achieved without the interaction within the system (p. 136). There is also a notion that the open system will grow more complex over time when different kinds of components are added. Payne describes this as differentiation.

Hepworth and Larsen (1993) state:

In family groups, all members influence and are influenced by every other member, creating a system that has properties of its own and that is governed by a set of implicit “rules” specifying roles, power structure, forms of communication, and ways of negotiating and solving problems (p. 279).

Payne (1991) states the maintenance of a system’s fundamental nature can be described as homeostasis or equilibrium. Hepworth and Larson (1993) state families, as systems, develop mechanisms to maintain homeostasis in their structure and operation. This researcher believes this can be applied to various settings, including hospitals.

This researcher believes hospitals treating children diagnosed with conduct disorder and on medication to be open systems, as they have allowed

energy (medication) to cross their boundary. The medication the conduct disorder child takes is input, energy fed into the system across the boundary. This medication creates feedback loops. Payne describes feedback loops as “information and energy passed to the system caused by its outputs affecting the environment which tell it the results of its outputs”; outputs are the effects on the environment from the energy passed out of the system (p. 135). By inputting medication, reciprocity takes place, which is defined by Payne as an idea that if one part changes, that change interacts with all the other parts, which therefore will also change. As the behaviors of the child changes, so do the responses of the staff and their perception of their child’s behavior.

Therefore, by prescribing medication to a child diagnosed with conduct disorder, professional staff caring for that child will be able to measure their perception of the child’s behavior. Their perception of the child’s aggression is or is not altered, depending on whether the medication is effective or not. In the methodology section to follow, it is explained how the study will survey the professionals to determine how they were effected by the input of medication into their hospital’s behavioral health unit’s system. This is an effort to uncover if they believe the child they are serving has exhibited more or less symptomology since they began taking medication for their disorder. Questions on the survey are aimed at obtaining the staff’s observations of the child’s behaviors. If the medication has effected the system by reducing the child’s aggressive behaviors, the professional staff who are part of that system, will be effected as well, and

therefore their answers to questions about the child's behaviors will reflect that.

In essence, we are measuring the feedback loop, and the reciprocity that has taken place in their system.

CHAPTER IV

Methodology

This chapter will focus on the research design and question, as well as definition of term and subject selection. Also in this chapter, measurement issues and data collection and analysis are discussed. Finally this chapter covers protection of human subjects, and the strengths and limitations of the study.

Research Design

The research presented here is an exploratory descriptive study. This study was cross-sectional in design and combined both qualitative and quantitative methods to answer the research question. A self-administered questionnaire was utilized to gather data from the professionals participating in the study. The questionnaire contained both open-ended questions and Likert type scaled questions borrowed from the Conners' Rating Scales (Conners, Sitarenios, Parker, and Epstein, 1998), as well as questions of this researcher's own design. This design was favorable because it was time efficient and cost effective. It also offered anonymity for participants and avoided interviewer bias (Rubin & Babbie, 1997).

Research Questions

The research questions posed were: In what ways do professionals find medication helpful in the treatment of children diagnosed with conduct disorder, and what other interventions are helpful?

Conceptualization

The following terms used in the research question will be defined: professionals, treatment, and conduct disorder. The term “professional” in this study refers to the people who are currently working with the children on Avera McKennan’s Behavioral Health Unit. This includes nurses, social workers, counselors, and any other professional staff that have been in contact with the children. “Treatment” is defined as a way of dealing with a problem, and “conduct disorder” is a DSM-IV diagnosis which reads; “A repetitive and persistent pattern of behavior in which the basic rights of others or major age-appropriate societal norms or rules are violated, as manifested by the presence of three (or more) of the following criteria in the past 12 months, with at least one criterion present in the past 6 months” (American Psychiatric Association, 1994, p. 66). The following are the four major headings for the criterion used to diagnose someone with conduct disorder: aggression to people or animals, destruction of property, deceitfulness or theft, and serious violations of rules. (For a complete description of the diagnostic criteria for conduct disorder, please see appendix A.)

Operationalization

The questionnaire administered to participants utilized open-ended questions to obtain factual information about the children's treatment such as, their gender, age, and medications both upon admission and currently. Also, participants were asked if the family is receiving any other services for this issue, if so, what they are and if they are believed to be helpful. The questionnaire also included Likert type scaling on thirty-two of the items, sixteen of which were borrowed from the Conners' Rating Scales (Conners et al., 1998), a standardized parent rating scale used in diagnosing children. Conners et. al. describes this questionnaire as a popular one for screening and assessing behavior problems. This researcher simply borrowed the questions from that scale that are used in diagnosing conduct disorder. The last sixteen items on the questionnaire are psychosocial type questions of this researcher's own design that focused on how the child is functioning at home, in school, and in the community. A draft of the questionnaire is included in Appendix E.

Participants

Participants for this study were obtained through Avera McKennan Hospital. Surveys, as well as a cover letters (see Appendix D) explaining the research, were administered to all the professional of their behavioral health unit working with children diagnosed with conduct disorder.

Measurement Issues

Systematic error may be an issue in this research as some of the professionals may have answered the questions biasly, based on what they think or would like the child's behavior to be like, instead of how it truly was.

Pre-testing of the questionnaire was done in order to increase validity and reliability. The measurements used were nominal, ordinal, and interval. The Likert type scale is ordinal, gender nominal and age interval. Both discrete and continuous variables were used. For example, the nominal measures used are discrete variables, while age, the interval variable, is a continuous one.

Data Collection

The questionnaire used in this research can be found in Appendix E. Pre-testing of the questionnaire was done with professional peer colleagues that were similar to the study subjects, none of whom were eligible to participate in the study.

Data Analysis

Data analysis includes the assignment of T scores to the items borrowed from the Conners' Rating Scales and the use of percentage pies and tally sheets to analyze the questions of my own design. A line graph is also used to demonstrate the differences in T scores before medication or upon admission and at discharge or currently. The questionnaire gathered both qualitative and quantitative data. The findings are presented in narrative form as well as in tables and tally sheets.

Protection of Human Subjects

To ensure protection of human subjects in this study the following precautions were utilized: voluntary participation, informed consent, and anonymous responses. Questionnaires will be destroyed after the data has been analyzed and the research project completed. Instructing the respondents not to include their name or the child's name anywhere on the questionnaire ensured anonymity. Consent was assumed by the return of a completed questionnaire.

CHAPTER V

Findings

On April 15, 1999 twenty questionnaires were distributed to Avera McKennan Hospital's Behavioral Health staff. Participants were given seven days to complete the questionnaires and return them. Of the twenty distributed seven were returned and useable for the study. This resulted in an overall return rate of 35%. In this chapter the findings are presented and appear in the same order that the questions appeared on the survey.

Question one: Gender of the child?

Of the seven respondents, six selected male children (85.7%) and one selected a female child (14.3%) to fill out the survey.

Question two: Age of the child?

The children ranged in age from five to sixteen. Of the seven surveys two of the children were fifteen years of age while the others were: sixteen, thirteen, twelve, ten and five. This resulted in an average age of 12.3 years.

Question three: What prescription drug(s) was the child taking upon admission (if any)?

Upon admission all the children were taking some sort of prescription medication. Two of the children were taking Effexor, one was taking Ritalin, another Paxil, and another a combination of Tegretol and Neurontin. The other

two children were admitted taking the same combination of the following:
risperidone, remeron, zoloft, and klonopin.

Question four: What prescription drug(s) is the child currently taking or was taking at discharge?

Currently or at discharge the children were taking the following medications: 1)Effexor, 2)risperdal, 3)Dexadrene and Zantac, 4&5)risperdal, clonidine, remeron, and zoloft, 6)nothing 7)tegretol, neurontin, and adderall.

Question five: How long has the child been taking this medication(s)?

Answers to this question ranged from five to eight days to six months. Survey #1 showed the child had been taking Effexor for six months. Survey #2 stated the child had been taking risperdal for nine days. Survey #3 indicated the child had been taking Dexedrene and Zantac for nine days. Survey #4 stated the child had been on risperdal, clonidine, remeron and zoloft for “a couple of weeks”; while survey #5 gave the child’s admission and discharge dates, August 19, 1998 and September 1, 1998. Survey #6 did not have a response; while survey #7 stated “five to eight days – unable to determine specifically”.

The table on the following page illustrates the responses to questions three through five. Please note that the children used in this study may carry multiple diagnoses and the medication they are taking may or may not be prescribed for conduct disorder.

Medication Information

<i>Survey Number</i>	<i>Medication taken upon admission</i>	<i>Medication currently taking or at discharge</i>	<i>Duration of use</i>
1	Effexor	Effexor	6 Months
2	Effexor	Risperdal	9 Days
3	Ritalin	Dexedrene / Zantac	9 Days
4	Risperidone / Remeron / Zoloft / Klonopin	Risperdal / Clonidine / Remeron / Zoloft	2 Weeks
5	Risperidone / Remeron / Zoloft / Klonopin	Risperdal / Clonidine / Remeron / Zoloft	12 Days
6	Paxil	None	
7	Tetgretol / Neurontin	Tegretol / Neurontin / Adderall	5 - 8 Days

Question six: Is the family currently receiving any other services for this issue? Yes No Unknown If yes, what are they and when did they begin?

Of the seven respondents four (57%) answered “yes”, while two answered “no” (29%), and one answered “unknown” (14%). Those participants that answered yes gave the following responses: family sessions two years ago, placement upon discharge, counseling, and individual and family treatment while in the hospital – place in residential placement upon discharge.

Question seven: Do you believe these services are helpful? Yes No If yes, which ones?

The respondents that answered yes to question number six, also answered question seven. Of those respondents three answered “yes” (75%) they believe the services to be helpful. One answered “no” (25%) they did not believe the counseling to be helpful. Those participants that answered “yes” gave the following services as the ones they believe to be helpful: family sessions, placement, individual and family treatment, and residential placement.

T scores were assigned to the items borrowed from the Conners’ Rating Scales and are illustrated on the next page, followed by the responses to psychosocial questions of this researchers own design.

CONNERS' SCORES

Survey Number	1	2	3	4	5	6	7
Sex of Child	Male	Male	Male	Male	Male	Male	Female
Age of Child	16	15	5	13	12	15	10

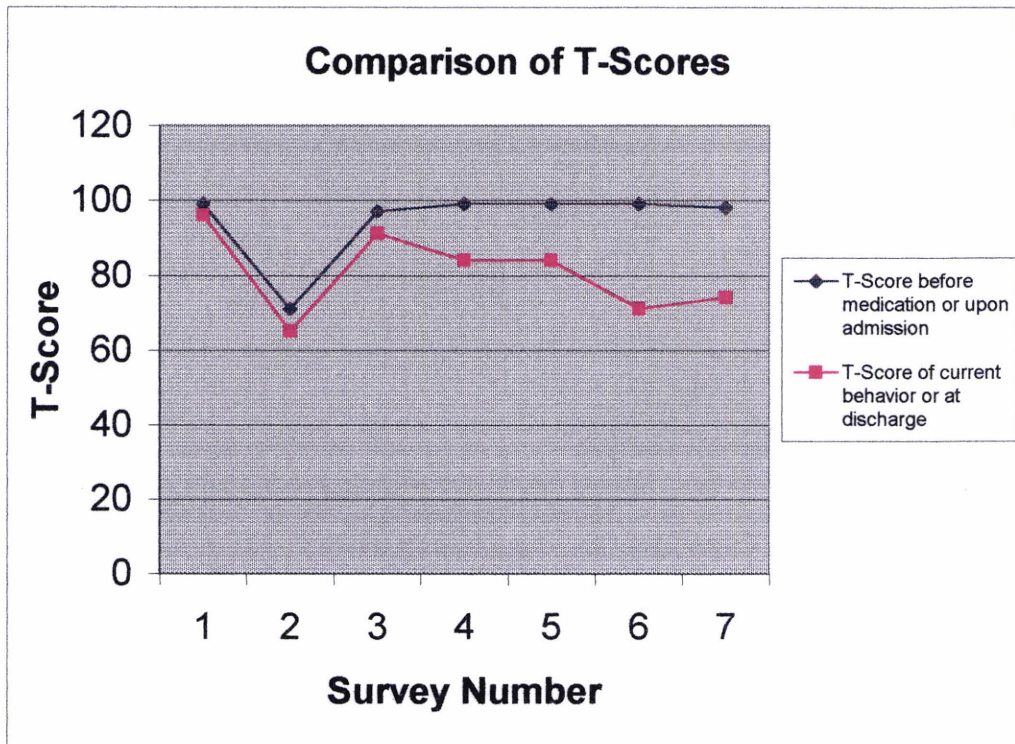
Results before medication or upon admission

Sum of the eight Connors' Questions	22	11	21	21	21	22	18
T-Score before medication or upon admission	99	71	97	99	99	99	98

Results of current behavior or at discharge

Sum of the eight Connors' Questions	20	9	17	15	15	11	10
T-Score of current behavior or at discharge	96	65	91	84	84	71	74

Average T-Score before medication or upon admission 94.6
 Average T-Score of current behavior or at discharge 80.7



Results of the Psychosocial Questions

Results before medication or upon admission

Survey Number	1	2	3	4	5	6	7
Participated in family activities	Sometimes	Unknown	Most of the Time	Never	Unknown	Unknown	Unknown
Obeys rules set for him/her at home	Sometimes	Sometimes	Sometimes	Sometimes	Sometimes	Sometimes	Sometimes
Follows directions and rules at school	Most of the Time	Sometimes	Sometimes	Sometimes	Unknown	Sometimes	Sometimes
Participated in family activities	Never	Unknown	Never	Never	Unknown	Unknown	Unknown
Involved in a community club	Never	Unknown	Never	Never	Never	Unknown	Unknown
Obeys laws	Most of the Time	Most of the Time	Sometimes	Sometimes	Sometimes	Most of the Time	Sometimes

Results of current behavior or at discharge

Survey Number	1	2	3	4	5	6	7
Participates in family activities	Sometimes	Unknown	Most of the Time	Never	Unknown	Unknown	Unknown
Obeys rules set for him/her at home	Sometimes	Unknown	Sometimes	Most of the Time	Sometimes	Most of the Time	Unknown
Follows directions and rules at school	Most of the Time	Most of the Time	Most of the Time	Most of the Time	Sometimes	Most of the Time	Unknown
Participates in family activities	Never	Unknown	Never	Never	Unknown	Unknown	Unknown
Involved in a community club	Never	Unknown	Never	Never	Unknown	Unknown	Unknown
Obeys laws	Most of the Time	Unknown	Sometimes	Most of the Time	Sometimes	Unknown	Unknown

Tally sheets for the Psychosocial Questions

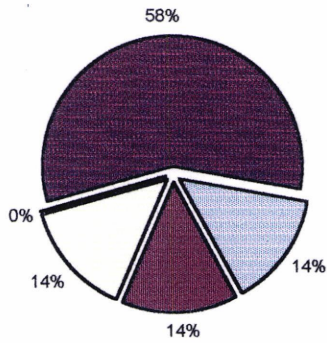
Tally Sheet - Results before medication or upon admission

	Never	Sometimes	Most of the Time	Always	Unknown
Participated in family activities	1	1	1	0	4
Obedys rules set for him/her at home	0	7	0	0	0
Followed directions and rules at school	0	5	1	0	1
Participated in family activities	3	0	0	0	4
Involved in a community club	4	0	0	0	3
Obedys laws	0	4	3	0	0

Tally Sheet - Results of current behavior or at discharge

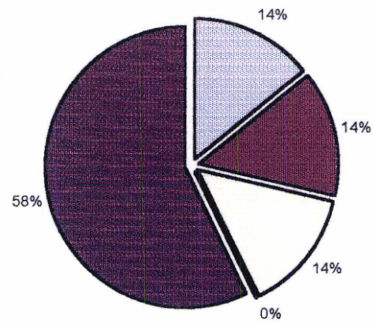
	Never	Sometimes	Most of the Time	Always	Unknown
Participates in family activities	1	1	1	0	4
Obedys rules set for him/her at home	0	3	2	0	2
Follows directions and rules at school	0	1	5	0	1
Participates in family activities	3	0	0	0	4
Involved in a community club	3	0	0	0	4
Obedys laws	0	2	2	0	3

Participated in family activities -
Before medication or upon admission



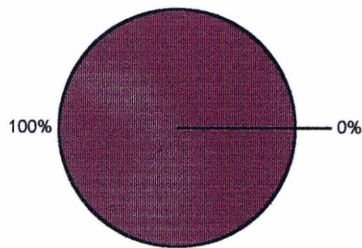
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Participates in family activities -
Current behavior or at discharge



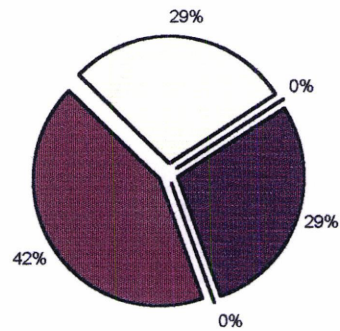
Never Sometimes Most of the Time Always Unknown

Obedied rules set for him/her at home - Before
medication or upon admission



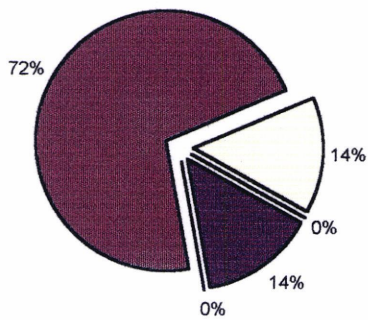
Never Sometimes Most of the Time Always Unknown

Obeys rules set for him/her at home -
Current behavior or at discharge



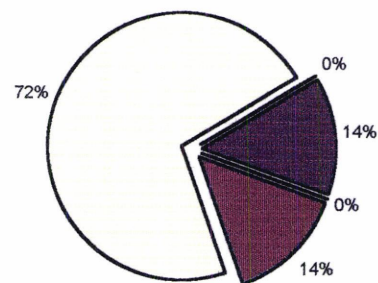
Never Sometimes Most of the Time Always Unknown

Followed directions and rules at school - Before
medication or upon admission



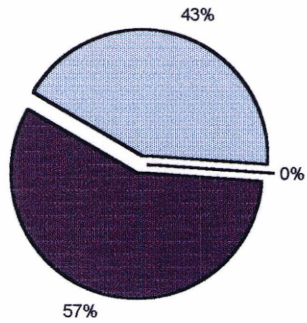
Never Sometimes Most of the Time Always Unknown

Follows directions and rules at school - Current
behavior or at discharge



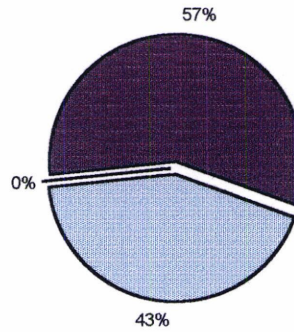
Never Sometimes Most of the Time Always Unknown

Participated in family activities -
Before medication or upon admission



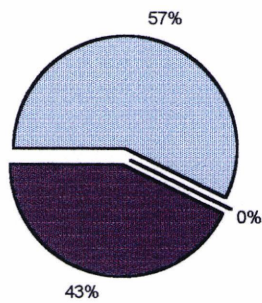
Never Sometimes Most of the Time Always Unknown

Participates in family activities -
Current behavior or at discharge



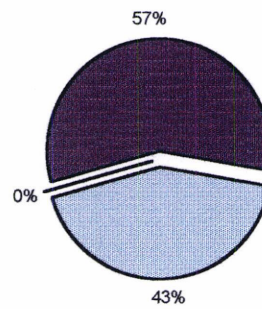
Never Sometimes Most of the Time Always Unknown

Involved in a community club -
Before medication or upon admission



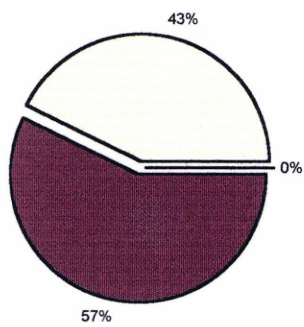
Never Sometimes Most of the Time Always Unknown

Involved in a community club -
Current behavior or at discharge



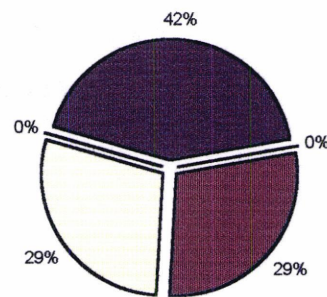
Never Sometimes Most of the Time Always Unknown

Obeeyed laws -
Before medication or upon admission



Never Sometimes Most of the Time Always Unknown

Obeys laws -
Current behavior or at discharge



Never Sometimes Most of the Time Always Unknown

CHAPTER VI

Discussion and Implications

This chapter will discuss the strengths and limitations of the study as well as the findings. The implications these findings have on social work practice are also outlined. Finally, this chapter covers recommendations for future research and conclusions.

Strengths and Limitations of the Study

A strength of this study is that it gathered both qualitative and quantitative data by asking both open-ended and closed-ended questions of its participants. Another strength is the participants never met the researcher, so the likelihood of anyone answering questions to please the researcher was reduced. Also, reluctance to report on the difficult behaviors of the children was reduced by having the questionnaire be a self-administered one.

A limitation in this study would be the small sample size. Seven participants is not a large number for survey research and is not representative of the population being studied. Also, participants may have misinterpreted a question or statement on the survey, thus skewing the results. Another limitation of this study is it only surveyed the professionals working with the children and not their families, and it only surveyed one facility. Different hospitals and agencies may use different medications and opinions may differ about their effectiveness from facility to facility. Also, only one child in the study had been

taking his medication long enough to be experiencing its full effects, and another child included in the study was only five years of age and could be considered an outlier.

Ideally the questionnaire used in this study would have been broken into a pre-test, taken by staff at a child's admission, and a post-test, taken at discharge, but time did not allow for that. Some researchers may also consider the use of the Connors' Rating Scales as a limitation, as some psychiatrists use it exclusively to diagnose Attention Deficit Disorder.

Discussion of Findings

In what ways do professionals find medication helpful in the treatment of a child diagnosed with conduct disorder? What other interventions are helpful? Based on the answers given the most obvious answer to the first research question is they do not find medication that helpful. The child who improved the most was the child that was taken off his medication while in the hospital. This child's (survey #6) T score improved twenty-eight points while in the hospital. This is an interesting point as the literature on this disorder cautions us not to give medication too quickly, as some children may simply benefit from the structure of the facility (Malone et al., 1997). However, the child described in survey #7 did show a twenty-four point improvement in her T score. Could a drug not known in the treatment of conduct disorder, Adderall, account for such an improvement. This researcher had never heard of this drug before or seen it anywhere in the literature. In speaking with a pharmacist, this researcher

discovered that this drug is usually prescribed for ADHD. It is a derivative of dexedrene (see appendix F). This researcher believes this drug is unlikely to be the cause of the improvement in the child's behavior as the child had only been on the drug five to eight days, not a significant amount of time to effect the child's behavior. Most psychiatrists feel dexedrene needs to be taken regularly for four to six weeks to reach its maximum potential. This researcher believes that this child too simply benefited from being on the unit as did the children described in surveys #4 and #5.

Both children in surveys four and five improved their T scores by fifteen points but were taking basically the same medications at discharge as upon admission. The only difference in the medication the children were taking from admission to discharge was the switch from klonopin to clonidine. Again, this researcher does not feel these children were taking the drug long enough (survey #4 - two weeks and survey #5 - twelve days) for it to reach its full potential. Children in surveys two and three experienced only a six point improvement in their T scores after having their medication changed at the hospital. While the child in survey #1 only showed a three point improvement while his medication remained the same.

It appears that the greatest benefit of being on the unit is improving your ability to follow directions and obey rules as this area showed the biggest stride from admission to discharge. Again the child who went off medication in the hospital was the one who showed the greatest improvement by sometimes

following directions and obeying rules to doing these things most of the time.

The child described in survey #4 experienced the same gains.

Besides the benefits from being in a structured setting, this researcher agrees with the participants in this study that other services like individual and family counseling are often times helpful in the treatment of this disorder.

Residential placement may also be warranted and beneficial both to the child and their family.

Implications for Social Work Practice

As more medications are being offered as treatment for emotional and behavioral type problems, it is crucial to know if they are effective. As social workers, working with families who have children with behavioral disorders, it is vital for us to be informed on effective treatments. Clients we work with will look to us for guidance on this issue, as it is not clear what the best form of treatment(s) for these children and their families are. Based on this research the most effective treatment of conduct disorder may be one that does not involve medication. However, it is important to remember that medication may be helpful in the treatment of other disorders that can also be found in conjunction with conduct disorder like attention deficit hyperactivity disorder.

Social workers working with families will also want to guide those families to services such as family and individual counseling or possible residential treatment if appropriate, as the behavioral health staff found those services to be most helpful. This researcher believes those interventions should include a

treatment like Kazdin's (1997) Parent Management Training, explained in detail under the literature review chapter of this thesis.

Recommendations for Future Research

Studies, considering factors other than the medication being given, such as this one, need to be replicated and applied to other settings such as residential treatment. This researcher initially wanted to survey the parents of children diagnosed with conduct disorder, but due to issues with confidentiality that was not possible. Ideally, releases should be signed for research purposes at the time a child is admitted to a facility for treatment. This would allow those studying the effects of treatment to survey the parents and gather their opinions about the most effective treatments for their child and family.

Also studies like this one need to be given to multiple agencies at once and their findings compared. Research also needs to continue in the medical field as to the certain types of drugs being used to treat this disorder and their effectiveness. The current literature is not conclusive in this area and new medications are prescribed everyday.

Conclusions

Conduct disorder is a very serious diagnosis that can involve aggression, destruction, deceitfulness or theft, and serious violations of rules. It can lead to antisocial personality disorder. The research presented in this thesis will hopefully better inform social workers and other professionals working with these

children and their families about the different types of treatments for conduct disorder and their helpfulness.

There are no sure-fire cures for emotional and behavioral disorders. The only tools we have are the treatments that have developed out of trial and error. This researcher believes that all children suffering with an emotional or behavioral disorder deserves the best treatment possible. It is frustrating as a social worker to want the best for the people you are working with, but not knowing for certain what that is. That is why research is important, not only to this issue, but to many other issues in our field. We can make a difference in the lives of those we work with at all levels: individuals and their families, schools and the various health systems, and at the policy and program development level of all the entities we work with.

As for parents who have children diagnosed with conduct disorder:

- be informed about your child's problems, ask questions.
- advocate for your child.
- educate yourself about the disorder and treatments.
- keep an open mind, try different treatments, but most importantly get help, there are various entities that can assist you like: your child's school, social services, community organizations, and counseling centers.

- take care of yourself – take a break when you need to, you are your child’s best tool in dealing with this diagnosis and it is important that you stay healthy both physically and emotionally.

This researcher hopes that when a fellow social worker is faced with a family who has a child diagnosed with conduct disorder or any other emotional, behavioral, or mental disorder, that they take the time to understand what the disorder entails. Hopefully that worker will become familiar with issues and controversies surrounding the diagnosis, and not just leave it to the psychiatrist to figure out if the child needs medication or not. Most parents in this writer’s social work practice would rather engage in other types of treatment for their child diagnosed with conduct disorder, mainly because they do not want to subject their child to a drug that may not be helpful for them. Again this is important to note as Franklin (1992) points out, social workers need to act as educators, to help others working with the child to understand the child’s needs. Social workers need to advocate and take part to help clients make an informed decision about the treatment they choose.

When a social worker is faced with a family struggling with this disorder:

- Be supportive, the family may appear uncooperative, but keep in mind the difficult and exhaustive behaviors surrounding this disorder.
- Make referrals as appropriate, has the child seen a psychiatrist recently; have other disorders like ADHD been ruled out?

- Empower the child's parents and train them in the most effective way to parent their child by using a technique like PMT (Kazdin, 1997).
- If the child is struggling in school, get assistance such as tutors, or involve the child in a day treatment program. Also consider special school placement (Newcorn and Halperin, 1990).
- Be an advocate for the child, encourage a placebo period when/if the child is placed in an inpatient setting or if the child is taking medication on an outpatient basis (Malone, 1997).
- Educate the parents, those working with the child, and others around you about conduct disorder and what you have found to be helpful in working with the children diagnosed with it and their families.

All professionals working collaboratively can make a difference in these children's and their families lives. The most important thing to remember is to be informed and stay on top of the research, as this research indicates treatment and evidence of its effects change regularly. Any disorder that involves treatment using medication can evolve quickly.

Reference List

Abikoff, H., Klein, R.G. (1992). Attention-deficit hyperactivity and conduct disorder: comorbidity and implication for treatment. Journal of Consulting and Clinical Psychology, 60(6), 881-892.

American Psychiatric Association. (1994). Diagnostic criteria from DSM-IV. Washington, DC: American Psychiatric Association.

Children's Home Society Resource File (1998). Figure 2 – The first year of life cycle – the cycle of bonding and attachment. Children's Home Society, Sioux Falls, SD.

Conners, C.K., Sitarenios, G., Parker, J.D.A., Epstein, J.N. (1998). The revised Conners' parent rating scale (CPRS-R): factor structure, reliability, and criterion validity. Journal of Abnormal Child Psychology, 26(4), 257-269.

Cordoba, O.A., Wilson, W., Orten, J.D. (1983). Psychotropic medications for children. Social Work, 28(6), 448-453.

Cueva, J.E., Overall, J.E., Small, A.M., Armenteros, J.L., Perry, R., Campbell, M. (1996). Carbamazepine in aggressive children with conduct disorder: A double-blind and placebo-controlled study. Journal of the American Academy of Child and Adolescent Psychiatry, 35(4), 480-491.

DeChillo, N. (1993). Collaboration between social workers and families of patients with mental illness. Families in Society: The Journal of Contemporary Human Services, 72(4), 104-115.

Diamond, G.S., Serrano, A.C., Dickey, M., Sonis, W.S. (1996). Current status of family-based outcome and process research. Journal of the American Academy of Child and Adolescent Psychiatry, 35(1), 6-17.

Estrada, A.U., Pinsof, W.M. (1995). The effectiveness of family therapies for selected behavioral disorders of childhood. The Journal of Marital and Family Therapy, 21(4), 403-441.

Finnell, N. (1996). Adoption and attachment. The Theraplay Institute, Fall 1996, 1-2.

Firestone, P. (1982). Factors associated with children's adherence to stimulant medication. American Journal of Orthopsychiatry, 52(3), 447-457.

Franklin, C. (1992). Family and individual patterns in a group of middle-class dropout youths. Social Work 37(4), 338-344.

Gerten, A. (in press). Guidelines for intervention with children and adolescents diagnosed with conduct disorder. Journal of Social Work in Education, in press.

Hepworth, D.H., Larsen, J. (1993). Direct social work practice, theory and skills. Pacific Grove: Brooks/Cole Publishing Company.

Johnson, H.C. (1989). Disruptive children: biological factors in attention deficit and antisocial disorders. Social Work, 34(2), 137-144.

Kazdin, A.E. (1997). Parent management training: evidence, outcomes, and issues. Journal of the American Academy of Child and Adolescent Psychiatry, 36(10), 1349-1357.

Lytton, H. (1990). Child and parent effects in boys' conduct disorder: A reinterpretation. Developmental Psychology, 26(5), 683-697.

Malone, R.P., Luebbert, J.F., Delaney, M.A., Biesecker, K.A., Blaney, B.L., Rowan, A.B., Campbell, M. (1997). Nonpharmacological response in hospitalized children with conduct disorder. Journal of the American Academy of Child and Adolescent Psychiatry, 36(2), 242-248.

Mirza, K.A.H., Michael, A., Dinan, T.G. (1994). Recent advances in pediatric psychopharmacology: A brief overview. Human Psychopharmacology, 9, 13-24.

Nelson, J.K. (1998). . The meaning of crying based on attachment theory. Clinical Social Work Journal, 26(1), 9-22.

Newcorn, J.H., Halperin, J.M. (1990). Disruptive behavior disorders in children: diagnosis, assessment and treatment. Directions in Psychiatry, 10(9), 1-7.

Paternite, C.E., Loney, J., Roberts, M.A. (1995). External validation of oppositional disorder and attention deficit disorder with hyperactivity. Journal of Abnormal Child Psychology, 23(4), 453-472.

Payne, M. (1991). Modern social work theory: A critical introduction. Chicago: Lyceum Books, Inc.

Rifkin, A., Karajgi, B., Dicker, R., Perl, E., Boppana, V., Hasan, N., Pollack, S. (1997). Lithium treatment of conduct disorders in adolescents. American Journal of Psychiatry, 154(4), 554-556.

Riggs, P.D., Thompson, L.L., Mikulich, S.K., Whitmore, E.A., Crowley, T.J. (1996). An open trial of pemoline in drug-dependent delinquents with attention-deficit hyperactivity disorder. Journal of the American Academy of Child and Adolescent Psychiatry, 35(8), 1018-1025.

Rubin, A., Babbie, E. (1997). Research methods for social work. Pacific Grove: Brooks/Cole Publishing Company.

Steiner, H., Dunne, J.E. (1997). Summary of the practice parameters for the assessment and treatment of children and adolescents with conduct disorders. Journal of the American Academy of Child and Adolescent Psychiatry, 36(10), 1482-1486.

Theraplay Institute, The (1996). Adoption and Attachment Issue, Fall 1996, 1.

APPENDIX A

Diagnostic Criteria for Conduct Disorder

Diagnostic criteria for Conduct Disorder

- A. A repetitive and persistent pattern of behavior in which the basic rights of others or major age-appropriate societal norms or rules are violated, as manifested by the presence of three (or more) of the following criteria in the past 12 months, with at least one criterion present in the past 6 months:

Aggression to people and animals

- (1) often bullies, threatens, or intimidates others
- (2) often initiates physical fights
- (3) has used a weapon that can cause serious physical harm to others (e.g., a bat, brick, broken bottle, knife, gun)
- (4) has been physically cruel to people
- (5) has been physically cruel to animals
- (6) has stolen while confronting a victim (e.g., mugging, purse snatching, extortion, armed robbery)
- (7) has forced someone into sexual activity

Destruction of property

- (8) has deliberately engaged in fire setting with the intention of causing serious damage
- (9) has deliberately destroyed others' property (other than by fire setting)

Deceitfulness or theft

- (10) has broken into someone else's house, building, or car
- (11) often lies to obtain goods or favors or to avoid obligations (i.e., "cons" others)
- (12) has stolen items of nontrivial value without confronting a victim (e.g., shoplifting, but without breaking and entering; forgery)

Serious violations of rules

- (13) often stays out at night despite parental prohibitions, beginning before age 13 years
- (14) has run away from home overnight at least twice while living in parental or parental surrogate home (or once without returning for a lengthy period)
- (15) is often truant from school, beginning before age 13 years

(continued)

-
- B. The disturbance in behavior causes clinically significant impairment in social, academic, or occupational functioning.
- C. If the individual is age 18 years or older, criteria are not met for Antisocial Personality Disorder.

Code based on type:

- 312.81 Conduct Disorder, Childhood-Onset Type:** onset of at least one criterion characteristic of Conduct Disorder prior to age 10 years
- 312.82 Conduct Disorder, Adolescent-Onset Type:** absence of any criteria characteristic of Conduct Disorder prior to age 10 years
- 312.89 Conduct Disorder, Unspecified Onset:** age at onset is not known

Specify severity:

- Mild:** few if any conduct problems in excess of those required to make the diagnosis **and** conduct problems cause only minor harm to others
- Moderate:** number of conduct problems and effect on others intermediate between “mild” and “severe”
- Severe:** many conduct problems in excess of those required to make the diagnosis **or** conduct problems cause considerable harm to others
-

APPENDIX B

IRB Approval Letter

MEMO

April 27, 1999

TO: Ms. Deann Reese

FROM: Dr. Lucie Ferrell, IRB Chair

RE: Your IRB Proposal

This is written as a follow-up to our telephone conversation of 13 April. Your proposal, "Medication and Conduct Disorder: Professionals' Perceptions of its Helpfulness," is granted IRB approval, number 99-34-2. Please use this number on all official correspondence and written materials relative to your study.

Your study should prove beneficial to the social work discipline, and we wish you every success.

LF:lmn

c: Dr. Rosemary Link

APPENDIX C

Agency Approval Letter

March 23, 1999

Deann Reese
430 West Crawford
Laverne, MN 56156

Dear Deann:

Thank you for submitting your application to the Avera McKennan Research Committee in 1999. The committee members voted to approve Avera McKennan as a site for data collection. Please contact Linda Penniston at (605) 322-4336 to arrange for time to meet with the Behavioral Health Staff and provide information and education as needed to complete your survey.

Following publication of research findings please plan to present them to Avera McKennan staff. You may choose to provide a didactic or poster presentation, please include: focus of study, basic design of study, analysis and interpretation of data, and key findings along with how the findings may be utilized in our facility or surrounding community.

Please feel free to contact me at 322-5000 with any questions you may have. Thank you for assisting Avera McKennan with the advancement of research.

Sincerely,
Linda Young
Linda Young, RNC, MS
Co-Chair

Avera McKennan Research Committee
T. Lorang MA CCC-SLP
Tracey Lorang, MA, Speech Pathology
Co-Chair
Avera McKennan Research Committee

Voting Research Committee Members:
Janelle Christiansen, RN, MSN
Sharon Hoon, RN

APPENDIX D

Consent Letter to Participates

April 15, 1998

Dear Participant:

My name is Deann Reese, and I am a graduate student working toward a Masters in Social Work degree at Augsburg College in Minneapolis, MN. For my Master's thesis, I am researching the effects medication has on children diagnosed with conduct disorder.

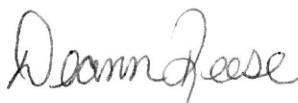
I am surveying staff who work with children with this diagnosis. You were selected as a possible participant through Avera McKennan Hospital's research committee, because you work on the Behavioral Health Unit. Although there are not any direct benefits to you, your input would contribute to the knowledge of this disorder and would be greatly appreciated. There are no risk to you as your input will in no way affect your employment at Avera McKennan Hospital, and I will not know your identity. Consent to participate in this study will be assumed by the return of a completed questionnaire.

Please do not place your name or the child's name anywhere on the questionnaire. Completed and returned questionnaires will be kept in a locked file in my home, and used in my research until they are destroyed by July 1, 1999. **Please return your completed questionnaire to Linda Penniston no later than MONDAY, APRIL 19.** The completion of this questionnaire will conclude your role in this research study.

If you have any questions, please feel free to contact me at (507) 283-1805 or my thesis advisor, Rosemary Link at (612) 330-1147.

THANK YOU!!

Sincerely,

A handwritten signature in cursive script that reads "Deann Reese".

Deann Reese,
Principal Investigator

APPENDIX E

Questionnaire

MEDICATION QUESTIONNAIRE

Thank you for participating in this study. Your input will be useful. This questionnaire will take you approximately fifteen minutes to fill out. Please answer the questions based on a child you have worked with that was diagnosed with conduct disorder.

PLEASE ANSWER THE FOLLOWING QUESTIONS:

1. Gender of the child? Male Female

2. Age of the child ? _____

3. What prescription drug(s) was the child taking upon admission (if any)?

4. What prescription drug(s) is the child currently taking or was taking at discharge? _____

5. How long has the child been taking this medication(s)?

6. Is the family currently receiving any other services for this issue?
Yes No Unknown If yes, what are they and when did they
begin? _____

7. Do you believe these services are helpful? Yes No If
yes, which ones? _____

NEXT PAGE >

(The following sixteen items were borrowed from the Conners' Rating Scales)

READ EACH OF THE ITEMS BELOW CAREFULLY, AND DECIDE HOW MUCH YOU THINK THE CHILD HAS BEEN BOTHERED BY THIS PROBLEM. PLEASE ANSWER THE FOLLOWING ITEMS BASED ON THE CHILD'S BEHAVIOR BEFORE HE/SHE WAS ON MEDICATION OR AT ADMISSION. CIRCLE THE APPROPRIATE NUMBER.

Not at all	Just a little	Pretty much	Very Much	
0	1	2	3	Basically an unhappy child.
0	1	2	3	Fights constantly.
0	1	2	3	Sassy to grown-ups.
0	1	2	3	Carries a chip on his/her shoulder.
0	1	2	3	Destructive.
0	1	2	3	Denies mistakes or blames others.
0	1	2	3	Quarrelsome.
0	1	2	3	Bullies others.

READ EACH OF THE ITEMS ON THE FOLLOWING PAGE CAREFULLY, AND DECIDE HOW MUCH YOU THINK THE CHILD HAS BEEN BOTHERED BY THIS PROBLEM. PLEASE ANSWER THE FOLLOWING ITEMS BASED ON THE CHILD'S CURRENT BEHAVIOR OR AT DISCHARGE. CIRCLE THE APPROPRIATE NUMBER.

Not at all	Just a little	Pretty much	Very Much	
0	1	2	3	Basically an unhappy child.
0	1	2	3	Fights constantly.
0	1	2	3	Sassy to grown-ups.
0	1	2	3	Carries a chip on his/her shoulder.
0	1	2	3	Destructive.

NEXT PAGE>

Not at all	Just a little	Pretty much	Very Much	
0	1	2	3	Denies mistakes or blames others.
0	1	2	3	Quarrelsome.
0	1	2	3	Bullies others.

READ EACH OF THE ITEMS BELOW CAREFULLY. PLEASE ANSWER THE FOLLOWING ITEMS BASED ON THE CHILD'S BEHAVIOR BEFORE HE/SHE WAS ON MEDICATION OR UPON ADMISSION. CIRCLE THE APPROPRIATE NUMBER. PLEASE CHECK UNKNOWN IF YOU DO NOT KNOW THE ANSWER.

Never	Sometimes	Most of the time	Always	Unknown
0	1	2	3	Participated in family activities. ___
0	1	2	3	Obedied rules set for him/her at home. ___
0	1	2	3	Followed directions and obeyed rules at school. ___
0	1	2	3	Participated in extracurricular activities at school. ___
0	1	2	3	Involved in a community club (i.e. BoyScouts, YMCA). ___
0	1	2	3	Obedied laws. ___

READ EACH OF THE ITEMS BELOW CAREFULLY. PLEASE ANSWER THE FOLLOWING ITEMS BASED ON THE CHILD'S CURRENT BEHAVIOR OR AT DISCHARGE. CIRCLE THE APPROPRIATE NUMBER. PLEASE CHECK UNKNOWN IF YOU DO NOT KNOW THE ANSWER.

Never	Sometimes	Most of the time	Always	Unknown
0	1	2	3	Participates in family activities. ___
0	1	2	3	Obeys rules set for him/her at home. ___
0	1	2	3	Follows directions and obeys rules at school. ___

NEXT PAGE>

Never	Sometimes	Most of the time	Always		Unknown
0	1	2	3		_____
0	1	2	3	Participates in extracurricular activities at school.	_____
0	1	2	3	Involved in a community club (i.e. BoyScouts, YMCA).	_____
0	1	2	3	Obeys laws.	_____

PLEASE RETURN YOUR COMPLETED SURVEY TO LINDA PENNISTON!!

Your comments and time are greatly appreciated.

Thank You!

APPENDIX F

Medication Glossary

MEDICATIONS

(in alphabetical order)

The following information was taken from The Pill Book (7th edition) by Chilnick, Stern, Silverman, and Simon; published by Bantam Books, New York, 1996.

Adderall: derivative of Dexedrine, commonly prescribed for Attention Deficit Hyperactivity Disorder.

Buspar: generic name buspirone, minor tranquilizer, commonly prescribed for anxiety.

Carbamazepine: brand name – Tegretol, anticonvulsant, commonly prescribed for seizure disorders.

Clonidine: brand name – Catapres Tablets or Catapres-TTS Transdermal Patch, antihypertensive, commonly prescribed for high blood pressure.

Dexedrine: stimulate, commonly prescribed for Attention Deficit Hyperactivity Disorder.

Effexor: generic name - venlafaxine, antidepressant, commonly prescribed for depression.

Klonopin: generic name – clonazepam, anticonvulsant, commonly prescribed for Petit mal seizures.

Lithium: brand name – lithium carbonate, antipsychotic; antimanic, commonly prescribed for manic and bipolar disorders.

Lithium Carbonate: see lithium

Neurontin: antidepressant, commonly prescribed for depression.

Paxil: generic name - paroxetine, antidepressant, commonly prescribed for depression.

Pemoline: brand name – Cylert, psychotherapeutic, commonly prescribed for attention deficit disorder.

Propranolol: brand name - Inderal, beta-adrenergic-blocking agent, commonly prescribed for high blood pressure and heart attack prevention.

Prozac: generic name – fluoxetine hydrochloride, antidepressant, commonly prescribed for depression.

Remeron: antidepressant, commonly prescribed for depression.

Risperidone: brand name – Risperdal, antipsychotic, commonly prescribed for the management of psychotic disorders and schizophrenia.

Ritalin: generic name – methylphenidate, stimulant, commonly prescribed for attention deficit disorder.

Tegretol: see carbamazepine.

Zantac: generic name – ranitidine, antiulcer, commonly prescribed for ulcers.

Zoloft: generic name – sertraline hydrochloride, antidepressant, commonly prescribed for depression.