DOCUMENT RESUME

ED 350 794 EC 301 607

AUTHOR Gieche, Ann M.; Bhavnagri, Navaz P.
TITLE Educating Adolescents on the Effects of Crack Cocaine on Unborn Children.
PUB DATE [90]
NOTE 113p.
PUB TYPE Dissertations/Theses - Practicum Papers (043) -- Reports - Research/Technical (143)

EDRS PRICE MF01/PC05 Plus Postage.
DESCRIPTORS Adolescents; Cocaine; *Crack; *Drug Abuse; *Drug Education; Emotional Disturbances; *High Risk Students; High Schools; High School Students; Learning Disabilities; Mild Mental Retardation; *Pregnancy; *Prenatal Influences; Teaching Methods
IDENTIFIERS *Fetal Drug Exposure

ABSTRACT

Ten high-risk, special education adolescents were given an instructional program for five days in health education on crack cocaine and its effects on the fetus. Students included five with learning disabilities, three with emotional impairments, and two with educable mental impairments. All of the subjects live and attend school in a primarily rural area in St. Clair County, Michigan. The instructional intervention included resource persons, role playing, videos, hands-on materials, oral reading, and written assignments. Data collected through evaluation of lesson plans, observation, student-generated products, and pre-post assessment indicated that students increased in overall knowledge of crack cocaine and its effects on the fetus. Appendixes contain intervention goals, schedules, lesson plans, student work samples, and the researcher's diary of observations. (Contains 13 references.) (Author/JDD)

EDUCATING ADOLESCENTS ON THE EFFECTS OF CRACK COCAINE ON UNBORN CHILDREN

By : Ann M. Gieche M.Ed.
Wayne State University

Dr. Navaz P. Bhavnagri
Associate Professor
Early Childhood Education
Wayne State University

ACKNOWLEDGEMENTS

Abundant thanks are extended to the many people who have made this research possible:

To Dr. Navaz Bhavnagri, my professor, for her guidance and patience with me as I conducted the research. Making herself readily available, she held many appointments with me to advise and assist with my work. She proof-read and made editorial changes in sections of the paper assisting me every step of the way. From her I have learned much about conducting and reporting the findings of research.

To the school personnel where the research was conducted: Anne Cherry, the teacher who "loaned" me her class and classroom, fitting my research needs into her schedule, and to the students in her class who were willing to share samples of their work and who role played so enthusiastically; Mary Davenport, my paraprofessional, for her support and help with my own classroom; Stan Renner, curriculum director, for allowing schedules to be changed and for making the equipment available to produce the written product of this research; and Al Lewandowski for his technological assistance to both the typist and myself. I appreciate the help that each of you have given me and if it were not for all of the above mentioned people this project would never have been completed.

To Laura Gutt, whose expert editorial and computer skills produced the final product of this project. Her moral support was of immense value to me in the final hours of production . She worked very hard and put much time into typing and revising, always with a smile and a positive comment.

To my daughters, Jessica and Rachel, for waiting for my attention and bearing with my tiredness so often, and my husband, Ray, for taking on many additional household duties such as shopping, cooking, cleaning, laundry, and childcare as this research project was being completed.

TABLE OF CONTENTS

Abstract

Ten high risk, special education adolescents (five learning disabled, three emotionally impaired, and two educable mentally impaired) were given an instructional program for five days in health education on crack cocaine and its effects on the fetus. The instructional intervention included resource persons, role playing, videos, hands-on materials, oral reading, and written assignments. The data was collected through evaluation of individual lesson plans, researcher's observational diary, subject-generated products, and a pre- and post-assessment of subjects' knowledge of crack cocaine. Formulative evaluations of individual lesson plans and researcher's observational diary indicated that the subjects understand the physical and psychological effect of crack cocaine on the fetus. The summative evaluation using a pre- and post-assessment indicated an 11% increase in subjects' overall knowledge of crack cocaine. This investigation confirms that subjects gained significant knowledge about the effects of crack cocaine on the child when introduced prenatally.

INTRODUCTION

The topic of the research that will be discussed in this paper is crack cocaine. The researcher's interest was in the effects that crack has on unborn children. Unborn is defined as prenatally. The term infant will refer to birth to age 2 1/2 and preschoolers will be catagorized by age 2 1/2 to 5 years. Adolescents will be defined as 13-17 year old children.

For the purpose of this paper the terms cocaine and crack cocaine will not be used interchangeably. Crack cocaine is a form of cocaine derived by freebasing or separating the pure cocaine from a hydrocholoride base. Crack cocaine is 90% to 100% pure cocaine (McCorry, 1990). Cocaine is mixed with baking soda and water and heated until it becomes flat. It is dried until hardened then broken up into chunks to be placed in vials. Crack is easily made and sold on the streets for $5.00 to $10.00 a vial and each vial gives the user enough of the drug for 2 to 3 uses. Each use produces a "high" lasting approximately 5 to 10 minutes. Crack cocaine is extremely dangerous and highly addictive. It may be much more addictive than heroine with a user becoming addicted after as few as two uses.

When used by an expectant mother crack cocaine crosses the placental barrier. Many women mistakenly believe that the placenta protects the baby and many babies are adversely affected by crack use. Koppleman and Miller (1989) stated that approximately 370,000 infants are affected prenatally by their mother's cocaine use each year. Other sources report similar numbers (Rist 1990, Blair 1992). It is believed that these numbers will increase as use of the drug becomes even more widespread (Blair, 1992).

Usage of crack cocaine appears to cross all socioeconomic levels. It first showed up in 1985 in inner cities quickly spreading to the suburbs and then to rural areas. Twenty million people have tried it, and five million use it on a regular basis (Chasnoff, 1987). As early as 1988, crack cocaine usage was reported in all areas of Michigan except in very remote areas of the Upper Peninsula (Ingersoll, 1988). Much of the crack cocaine in the state of Michigan comes out of the city of Detroit. The drug is becoming very easy to obtain in rural areas outlying surburban Detroit.

This study was conducted with a group of adolescents in a rural high school since high school students are at risk for using crack. Hillman (1990) reports that almost 5% of high school students have used crack cocaine . According to Meyer (1986), by college graduation 40% of the students have used crack cocaine . These are all people in their child-bearing years who have a risk of exposing their unborn children to the hazards of a brutal drug. If this continues the numbers of crack-exposed children will continue to climb at a very fast pace. This could have a tremendous impact on our society as a whole.

As previously stated, crack is easy to find, cheap, and produces a pleasant sensation for the user. Adolescents are very susceptible to peer pressure and fads, and cocaine is seen by many as a prestige drug. Many teenagers are unaware that crack cocaine is stronger and more harmful than cocaine, and even when they do know they may ignore that fact since they are often egocentric. They believe that no harm can come to them.

Some adolescents experiment with other drugs such as alcohol, cigarettes, or marijuana before using crack. One of the great dangers of crack is that it is highly

addictive sometimes only after a single use, and it can kill even after one use. Adolescents often do not fully understand the power of the addiction or its lethal character.

Some of the adolescents are in a higher risk group than others in relationship to using illegal drugs. The risk factors have been indentified by several sources through surveys and other types of research. School-related factors such as a lack of interest in school, discipline problems, truancy, low standard test scores, retention, poor English proficiency, and being older than classmates are items that place an adolescent at risk (Capuzzi and Gross, 1989). Other factors are: decreased law abidance, decreased religious commitment, depression, attention deficit disorder, and family problems (Browner and Anglin, 1987). Most special education students would fall into one or more of the above-mentioned categories.

Special education students almost always have a history of learning problems in school. They usually score low on standardized tests, and English proficiency tests and are often older than their classmates. Some students have a disinterest in school and a history of discipline problems. Many times special education students do not feel like they fit in at school, have family problems, lowered self-worth, problems with the law, and may not be involved in any activities outside of school and this further places the student at risk. Hillman, Becker, Ogilvie, and Sawilowsky (1990) report that students involved in extracurricular activities use drugs less often.

Since these special education students have this overabundance of problems, they are considered a high risk population for using drugs. Preventative programs

are desireable, especially because of the strong addictive nature of crack cocaine and the increase in use as students become older. Koppleman and Miller (1989) cite that less than 25 percent of known crack addicts remain drug free for six months in most treatment programs. Therefore, adolescents which are at greatest risk need to be involved in prevention programs which provide accurate information for students. Usually, adolescents know something about drugs, but their information may not be accurate. Currently, there are no studies known to this researcher which use instructional strategies with special education adolescents to prevent crack cocaine use.

Research on prevention programs with other drugs such as marijuana, alcohol, and tobacco report that teaching the facts about the drug is an important component of a long-term prevention program (McCorry 1990, Moskowitz 1985, Browner and Anglin 1987). Adolescents do not always know a lot about the psychological and physiological effects of drugs. Research done by the National Catholic Education Association shows that instructional program components are successful when information is presented in a straight forward manner. Accurate information about the drug should be presented to the subject using a unit format. A variety of teaching materials are effective; visuals and speakers are often used with success. These methods enable subjects to internalize their learning and help to make the material less abstract.

Maskowitz found in 1985 that providing information alone is not sufficient to change behavior and attitudes. Problem solving, decision making, and value awareness need to be addressed along with instruction but learning about the drug

is an important place to begin. Browner and Anglin (1987), reviewing studies involving intervention programs, found that the most effective total programs deal with reducing risk factors over a long period of time, such as one or more years, in addition to providing information about the drug. The researcher will be dealing with short-term instruction targeted at an adolescent group. Blair (1992) recommends that prevention information on its own has the greatest impact when the receiver of the information is still in the experimental stage of drug usage.

The researcher is only dealing with the instructional component of a prevention program. Being that the research setting is a school and time was limited to complete the study, only this aspect was chosen. The intent of the research is educational; long-term prevention for attitudinal and /or behavioral changes are further components which can be dealt with at a later date by professionals in the field of psychology.

This paper will describe a preventative instructional intervention focused on the prenatal effects of crack cocaine developed for a group of adolescent special education students. A review of the research related to prenatal crack cocaine exposure will be done followed by a description of the methods used. Later an explanation of the results will be given. A complete appendix of lesson plans and a researcher's diary will be found at the end of the paper. The appendix offers an in depth look at the intervention. Background information on crack cocaine and how it affects the fetus is given in the research review.

RESEARCH REVIEW

This review of research literature is focused on the effects of crack cocaine. First, the physical effects of crack cocaine on the user are described. Next, the physical effects of the drug on the fetus are described. Thirdly, the physiological effects of crack cocaine on the infant are discussed. The next part of the review deals with the environment that the infant will live in, and lastly, a look at the future life of the infant is presented. Crack is a drug that may greatly impact the unborn child.

Crack cocaine, an extremely potent form of cocaine is usually smoked. It enters the bloodstream almost immediately after ingestion and causes vasoconstriction in the user. Initially , a feeling of "tightening down" is experienced for one to two minutes. During this period, blood pressure and respiration increase. Strokes or heart attacks can occur at this time. Next, the user experiences 40-45 minutes of vasodilation or relaxation during which feelings of euphoria are experienced (Blair, 1992). At this time the user's system slows down, appetite is decreased, and digestion slows down until it almost stops. Crack users experience feelings of pleasure and contentment because crack stimulates the nervous system to release of dopamine, a neurotransmitter needed to experience pleasure. As crack enters the bloodstream, the brain's supply of dopamine becomes depleted resulting later in depression, irritability, and paranoia (Koppleman and Miller-Jones, 1989). These feelings cause the user to want more of the drug and thus a cycle of drug abuse has begun.

Crack cocaine is seen as a polydrug meaning that it is often used with other

drugs such as valium, alcohol, or marijuana. These drugs are used to soften the "crash" when the "high" is over. They help to mask some of the negative feelings and emotional effects of the crack, and they also compound the drug use problem by further addicting and/or impairing the individual.

Crack cocaine is often used by women of all races and socioeconomic levels as an escape from reality. Many of them are suffering from depression, boredom, or anxiety and often they are from dysfunctional families or have a history of abuse (Blair, 1992). Crack is cheap, easy to obtain, and easy to use. Several sources claim that it is used much more often than heroine by women (Koppleman and Miller-Jones 1989, Blair 1992). Many of the women who use crack cocaine are in their child-bearing years, and 93% of the female addicts are age 15-35 years who often already have had one or more children (Blair, 1992).

When a pregnant woman uses crack cocaine, her unborn child does, too. Crack gathers in the uterus which is similar to a bag of blood vessels. As the mother experiences vasoconstriction, the fetus does also. When the mother experiences vasodilation which slows her system the fetus continues to experience vasoconstriction for 40 to 45 minutes (Blair, 1992). As a result , the fetus experiences hypoxia, an increased heart rate, and may have a seizure during this time. Crack stays in the baby's body for two to three days (Chasnoff, 1987).

The crack also interferes with normal placental functioning. Nutrients and oxygen may not get to the fetus, and this affects the development of the fetus. The placenta may tear away from the uterine wall causing irreparable damage and possibly spontaneous abortion. Often, early in a pregnancy the fetus will miscarry

and later in the pregnancy premature labor will occur (Cook, Petersen, Ph.D., Tuell-Moore, 1990).

Sometimes women use crack to induce labor prematurely, as a method of abortion, or to simply have the baby delivered early. Babies born prematurely are often low birthweight babies with underdeveloped respiratory systems. There is a high incidence of death in low birthweight babies. They may also be malnourished due to fetal hypoxia and a lack of proper nutrition and medical care of the mother.

In addition to being born early, "crack babies" may have meconium (stool-like substance passed by newborns just after birth)-stained amniotic fluid, experience fetal distress during birth, and score low on the Apgar Neonatal Assessment both immediately after birth and five minutes after birth. Typically, the greater the prenatal exposure, the greater the damage to the fetus and many babies are placed into intensive care units. Some are born addicted and must go through withdrawal.

Infants may have central nervous system abnormalities and intestinal abnormalities along with a decreased head circumference (Cook, Petersen Ph.D., Tuell-Moore, 1990). Other effects are: urogenital malformations, cataracts, brain hemorrhages, heart defects, spina bifida, brain lesions, malformations of the genitals, and seizure disorders (Blair, 1992). Many birth defects occur of which the most common are: respiratory problems, heart problems, deformed limbs, brain lesions, and deformed exterior sex organs. A higher percentage of crack-exposed babies die of Sudden Infant Death Syndrome than in the general population.

Some of the adverse physical affects of crack cocaine exposure crossover to

psychological problems for the infant. Prenatal exposure to crack cocaine may cause an infant to experience feeding problems. Sometimes this is due to a difficulty in sucking, and other times feeding problems occur because the babies are very irritable and may cry frequently. From the number of crack-exposed babies who show signs of problems at birth, 80% are hyperactive and crying much of the time, and 20% are withdrawn and unresponsive (Blair, 1992). Either category can effect the receptiveness of the caretaker and interfere with normal social development.

Infants may experience tremors especially in the upper extremeties, may cry for long periods of time and may awaken easily. They may avoid eye contact, be hypertonic, and be tactilly defensive. Additionally, a long hospital stay may have occurred which can interfere with the bonding process thus increasing the problems of the "crack baby". It is difficult to form an attachment with the infant because some of these traits may continue into toddlerhood and later childhood. These infants and toddlers may withdraw from cuddling, and they may have emotional outbursts. Often, these children have problems interacting with other children and do not want to be touched (Kantrowitz, Wingert, De La Pena, Gordon and Padgett, 1990).

In addition to the physiological problems caused directly by crack, there are indirect problems. Problems within the environment in which the crack is used and into which the infant is born can have a negative impact. Some of these babies are simply left in the hospital by their mothers or are left on the streets. Babies who do not appear to have been adversely affected by prenatal exposure are left just as the

more severely affected are. Many infants end up in foster care and several states (California, New York) are looking at the option of opening up orphanages for them and other infants such as those suffering form Aquired Immune Deficiency Syndrome (Blair, 1992).

Many babies go home with their mothers at several days old or after a long period of hospitalization. Often the mother still uses crack cocaine. If the mother is using crack and breastfeeding, she may again be exposing her child to the negative effects of the drug as crack passes through breast milk to the baby. Studies done on breastfed infants report that the babies are often irritable and that traces of cocaine remain in their urine for up to 60 hours after nursing (Cook, Peterson Ph.D., and Tuell-Moore, 1989).

Babies may also be exposed to the smoke from crack cocaine on a daily basis in the home. Since crack cocaine is inhaled (smoked, not sniffed), it's sidestream of smoke has the same effect on the infant as on the smoker. The infant may be demanding and there may be several other children in the home. As the mother has difficulty coping, she may not respond appropriately to her infant's needs. She also may use more of the drug. Again bonding may be negatively affected or abuse and neglect may occur. Since crack hit the streets, the mortality rate for infants under one year old in Washington, D.C. has greatly increased (Rist, 1990). The current death rate stands at 32.3 in 1,000 births, and this is believed to be related to crack usage. Many infants do not survive the first year of life. Perhaps this high mortality rate is related to persistant drug exposure or to abuse.

Infants and preschoolers affected by crack often have a low frustration tolerance

and experience difficulty engaging in free play as well as in playing with others. They may still withdraw from people and have difficulty forming attachments. Often they still experience sleeping problems. Blair (1992) reported that the preschoolers who are the most severely affected by crack may experience problems in school. Emotional outbursts, fine-motor problems, poor visual attention, poor visual tracking, a hypersensitivity to multiple stimuli and difficulty structuring information all may affect school performance. Blair predicts and makes the above hypothesis based on ongoing empirical research at medical centers. In addition, they may experience speech and language delays, be visual or hearing impaired or have medical problems. All of these things impact school achievement, and many of these children are entering special education programs in schools.

Combine all of the difficulties a "crack baby" may experience, and it is almost too overwhelming to think about. Prenatal and postnatal crack cocaine exposure and environmental difficulties will impact the infant's future. An unstable home life, possible medical problems, and learning difficulties definitely will have a negative impact on the child.

Crack cocaine is a relatively new and very potent drug. It is highly addictive and its use is very widespread. Crack can negatively affect the unborn child and continue to affect the child after birth. Preventing infants from being exposed prenatally is very important. This researcher therefore investigated the effect of an instructional intervention would be on the subjects' knowledge of prenatal crack exposure. It is believed that subjects will gain significant knowledge about the effects of crack cocaine on the child when introduced prenatally. Educating teens

on the adverse effects of the drug could be one of the many strategies that would help to reduce the number of infants born who are prenatally exposed to crack cocaine.

METHODS

Subjects

The subjects involved in the study included ten special education students in a health education class. Seven of the subjects were certified learning disabled and had disabilities in the area of reading or math. Three subjects were certified as emotionally impaired and two subjects were certified educable mentally impaired. The group had a wide range of reading levels, ranging from 3.9 to 10.0, with 70% of the subjects reading at a sixth grade level or below. Six of the subjects were male and four were female. Six were 15 years old, three were 16 years old and one was 17 years old. Eight were high school freshman, and two were sophomores.

All of the subjects live in and attend school in a primarily rural area in St. Clair County, Michigan. The high school they attend is quite large with a student body of approximately 1,600 students. The school is located in an upper-middle class neighborhood but the attendance area encompasses a mix of low, middle and upper-middle class homes. The special education program at the school is departmentalized meaning that subjects move from class to class with the mainstream rather than remaining in self-contained special education classrooms; however, they are primarily taught by special education teachers.

The subjects had previous drug-awareness education and had recently studied about alcohol, tobacco, and marijuana. A pre-assessment given to the subjects listed five optional questions related to crack cocaine use. Nine out of ten of the subjects answered the questions. The information was used to provide a general

background on the subjects. The results were as follows:

1. 1 subject (11%) reported that they used crack cocaine "often"
2. 8 subjects (88%) reported that they had never used crack cocaine
3. 3 subjects (33%) reported that their friends used crack
4. 6 subjects (66%) reported that they were curious to learn more about crack cocaine.
5. 2 subjects (22%) reported that they'd like to try crack cocaine.
6. 3 subjects (33%) reported that crack was not dangerous to the user.

Procedures

An instructional preventative intervention program was the focus of this research. It was a seven day intervention program with each day consisting of a 65-minute class period. The research design was a quasi experimental design with students in one group using a pre - and post-test assessment. Copies of the assessments, a schedule of intervention, broad goals and detailed lesson plans can be found in the appendix of this paper. Several of the teaching materials that were used are also included.

The goals of the intervention program refer to providing the subjects information about the properties, characteristics, and effects of crack cocaine. Physical and psychological effects on both the expectant mother and the unborn child are addressed in relationship to vasoconstriction , vasodialation and birth defects. Abuse and or neglect are addressed as environmental effects of drug use.

Lesson objectives cover all of the goal areas in more specific detail. Objectives cover the physical characteristics of the drug, how it is made, the legal

repercussions, of using the drug, and how the behavior of the user is affected. Information on the physical effect that the drug has on the user in relationship to addiction is covered. Infant physical effects, birth defects, learning problems, and survival in relationship to early delivery, miscarriage, and Sudden Infant Death Syndrome are addressed. The infants home environment of crack usage, socialization problems, and abuse/neglect are looked at in relationship to the predicted future for the "crack" baby.

During the intervention program lessons are presented in a variety of fashions. Printed materials, brochures, newspaper, and magazine articles are used to present material four times. Two public speakers are utilized; a police officer and a registered nurse. A video showing "crack babies" is shown on one day of the intervention, and subjects are asked to role play a dysfunctional family on another day. During the intervention program, subjects are assigned to work in small groups as well as independently. Subjects summarize news articles, brainstorm lists of infant problems and birth defects. They are asked to answer verbal and written questions during lessons as well as to formulate questions of their own to ask the police officer and nurse speakers. Over the course of seven days a variety of activities take place as part of the intervention program.

On day one the subjects were given a pre-assessment. The assessment consisted of ten multiple choice questions and ten true or false questions relating to usage of crack cocaine, physical description of the drug, and the effect it has on an expectant mother and her child. Also included were five personal/confidential questions dealing with personal experience, use and curiosity about the drug

referred to previously during discussion of the subjects. All of the questions on the assessment were important in that they gave the researcher information on the subjects' prior knowledge of crack cocaine.

Assessment questions were developed by the researcher and directly relate to the lesson objective and broad goals. Questions for the post-assessment were developed from the pre-assessment. The same information was assessed; however, the questions were reworded. Tests were scored on a percentage basis on a scale of 0-100% as follows:

A = 95-100%

B = 85-94%

C = 70-84%

D = 60-69%

E = 0-59%

Following the completion of the pre-assessment, as a class, subjects read and reviewed the hand-out "The Drug Crisis Among Us Crack". The hand-out states basic facts about crack such as it's addictive properties. It was used to aide subjects in formulating questions about the drug and its properties to ask a police officer who was coming to speak. Each subject wrote three questions on a 3" x 5" index card and rank ordered the questions in order of importance from one to three.

Day two featured an officer from the police department speaking on crack cocaine. The researcher felt that subjects' need to learn about the properties, use, and danger of the drug before they can understand its effect on a fetus. The

particular officer chosen regularly speaks to classes on drugs and drug-related topics. He brought pictures as well as the actual drug. He shared his experience with crack cocaine users and answered questions. During the discussion he described the drug, its effects, where it is found and information pertaining to the legal aspects. Subjects used their index cards to remember the questions they intended to ask as the officer spoke. In addition to this, they were given question guides to fill in as they listened to the speaker. The guides help to focus the subjects and the physical act of writing helped to reinforce learning.

On day three subjects orally read and discussed an article from Current Events, a students' newspaper produced by the Weekly Reader company. The article was entitled "The Littlest Victims". The article contained pictures of "crack babies" in the hospital and reviewed the characteristics of the babies. During a discussion of the article each subject listed five characteristics of a "crack baby". The reading level was appropriate for the group and it was two pages in length. The article was introduced on this day as preparatory material for the following day when a registered nurse was scheduled to speak. Subjects were asked to list three questions to ask the nurse about the effect the drug has on a mother and fetus numbering them from one to three in order of importance. Questions were written on 3"x5" index cards and reviewed by the researcher before they were used.

In addition to writing questions, subjects were asked to locate, read and write a summary of a newspaper or magazine article relating to "crack babies". Examples of articles were shown to and discussed with the subjects. This assignment was meant to expand subjects' knowledge of the problems and dangers of drug usage as

well as help them to become aware that crack cocaine exists in almost every city and town in America.

Day four featured another speaker. A registered nurse from a local hospital spoke to the subjects about the physical and psychological effects of the drug. She had first-hand experience working with crack-exposed babies and had done follow-up work with preschoolers. She discussed the physical effects of the drug as well as the effect of prenatal use on the fetus. As the nurse spoke subjects took notes using a question guide similar to the guide used for the police officer. They also used their own personal questions on the 3"x5" cards.

After the speaker left, the subjects were randomly grouped into three groups and given an information sheet on cocaine use during pregnancy. Each team (group) chose a question from the sheet with which to work. They were asked to read the answer and prepare to list as many items as they could about it the following day. A teacher-made word search puzzle was assigned to each subject. The puzzle was used to reinforce terminology and use memory retention of crack-related vocabulary.

On day five, teams reported on their question sheet assignment. The teams with the most points listed about crack cocaine's effects prenatally won the game and each team member was given a pack of gum. The question sheet was used because it covered the basic facts of cocaine use during pregnancy. It was to the point and reinforced subject learning. Having subjects answer the questions by teams was seen by the researcher as motivating.

After the contest, subjects viewed a ten-minute video entitled Cocaine's

Children. The video showed actual babies in the hospital being treated after being born exposed and or addicted to crack cocaine. It was presented by Dr. Ira Chasnoff who has completed much research in the area. A parent was interviewed in the video with her six-year-old son who had been exposed prenatally. Using all of the information they had up to this point, subjects were asked to take the babies' point of view and write letters to their mothers from the perspective of a two week old infant .

On day six the subjects role played a day in the life of a family with a crack dependent mother. Four students acted out the parts of the dependent mother, co-dependent father, mascot child, and hero child. A sound-sensitive doll that cries like a newborn was used to represent the baby. This activity was meant to give subjects an inside look at the environment that the crack-exposed infant lives in. Follow-up activities included brainstorming a list of events or thoughts on what the future looks like for this infant and then writing individual letters to their mothers from the perspective of the baby at five years old. Additional time was given to students on this day to share their article summaries with the class if they chose to.

Day seven concluded the intervention program and subjects were given a post-assessment very similar to the pre-assessment. Again the assessment featured ten multiple choice, ten true or false, and five optional questions. A discussion of assessment results can be found in the results section of this paper. A researcher's diary which was kept during the intervention process can be found in the paper appendix section.

Subject General Information

	Certification Area	Reading Level	Age	Grade	Gender
A	EMI	4.8	15	9	F
B	LD	4.3	15	9	M
C	EI	3.9	17	10	M
D	EI	6.2	15	9	F
E	LD	7	16	10	F
F	LD	4.5	15	9	M
G	EI	9.6	15	9	F
H	LD	10	15	9	M
I	LD	6.2	16	9	M
J	EMI	Not on File	16	9	M

Key: LD = Learning Disabled

EMI = Educable Mentally Impaired

EI = Emotionally Impaired

RESULTS AND DISCUSSION

The intervention previously described was conducted to discover how an instructional intervention would effect a person's knowledge of prenatal crack exposure. Participants in the intervention did increase their knowledge of the effects of crack cocaine on the child when prenatally exposed.

Assessment scores have been reported on a percentage basis because of the small sample in the study since a sample of ten subjects does not distribute effectively on the bell curve to show substantial variance. Pre-assessment scores ranged from 8 items correct (60%) to 17 items correct (80%) with a mean score of 14.2 (75%). Post-assessment scores range from 14 items correct (70%) to 19 items correct (95%) with a mean score of 17.2 (86%). This shows an overall average increase of 3.0 (11%).

No differences in pre-assessment scores were found between males and females. The male average score was 74% (14.1 items correct), and the female average was 76% (14.2 items correct). However, there was a difference between males and females on the post-assessment. Females averaged 77% (15.2 items correct), and males averaged 91% (18.3 items correct) , meaning that male subjects scored 14% (2.8 points) higher than female subjects. *See attached graph.

Subjects in all three disability areas made gains after the intervention. The learning disabled group and the emotionally impaired group's scores increased by 3.0 (11%). As a group, the educable mentally impaired subjects increased their scores 5%. This increase even though modest is a major stride in gains since repetition is necessary to master learning and this study could only provide a limited

amount of repetition in five days. One subject from each disability group received slightly lower scores on the post-assessment than on the pre-assessment. Subject A scored 2 points lower, Subject D scored 1 point lower, and Subject E scored 2 points lower, this may have been by chance. These three subjects as observed by the researcher did not appear to be reading the assessment items carefully. They rapidly completed the assessment and showed no visible evidence of pausing, thinking, reread and double checking their answers. Additionally two of these three have been diagnosed with Attention Deficit Disorder. Regretfully, at the time of the assessment the room was warm, the hallway was noisy and it was just before lunch all of which may have adversely affected the subjects displaying this disorder. Perhaps that is why their performance is not significantly higher on the post-assessment. The third subject's score is more difficult to explain. Perhaps this subject experienced difficulty reading the material or comprehending the material. This subject is certified Educable Mentally Impaired and may not have received enough repetition of the material for mastery or could also have been influenced by the extrenuous distracting environmental circumstances stated above. The researcher had no control over the day, the time the assessment was given, or other environmental variables because the researcher was not the regular teacher of the class and had to fit into the existing schedule.

Five optional confidential questions were included on both the pre- and post-assessments and nine subjects answered the questions on each assessment. The questions provided the researcher with information on the subjects' views on crack cocaine prior to intervention as well as aiding the researcher on determining the

success of the intervention.

The researcher will first report their growth in learning and curiosity to learn as a result of the intervention. On the pre-assessment, six subjects (66%) showed an interest to learn about crack cocaine. During the post-assessment, all subjects (100%) reported that they had learned a lot and seven (77%) wanted to learn more. Curiosity for learning was aroused but not satiated.

During the intervention process the researcher was particularily interested to communicate that crack cocaine was dangerous as stated in all four broad goals. At the time of the pre-assessment, six subjects (66%) thought the drug was dangerous. During the post-assessment, eight subjects (88%) stated that it was "very" dangerous and one subject (11%) stated that it was "somewhat" dangerous. It would appear that subjects' awareness of the danger factor had increased. Therefore, the researcher can conclude that this portion of all four goals was reached.

Additionally, the researcher wanted to know the degree to which subjects valued this knowledge. One such evidence of showing this value is making a commitment of sharing this knowledge with others, particularily their friends. Hence, the researcher first inquired if they knew how many friends used crack cocaine, and three subjects reported on the pre-assessment that their friends used crack cocaine. However, in the post-assessment all of the committed themselves to telling their friends not to use it.

Finally, the researcher wanted to investigate if the intervention also shifted attitudes and/or behavior even though that was not the objective of the study. At the

time of the pre-assessment, one subject (11%) reported having used crack cocaine often, eight subjects (88%) reported that they had never used it, and two subjects stated that they'd like to try it. After the intervention none of the subjects reported a desire to try crack cocaine or use it again for those who previously used it. It appears that attitudes may have changed as they gained information during the intervention.

The results of these findings need to be interpreted with caution for two reasons. Firstly, self-report data of changes in attitude and behavior as stated in the last two findings is not actual evidence of real change. Secondly, they were reporting it back to the researcher who was publicly committed to this issue; therefore, it is socially desirable to give an answer that pleases the researcher, who represents authority.

However, there is evidence that they gained knowledge about the dangers of crack cocaine which was a goal of the researcher. Since knowledge of the dangers of the drug is embedded in all four goals, the researcher believes that all goals of the intervention were attained. Subjects had the best understanding of goal 3 which related to the physical and psychological effect on the fetus in terms of vasoconstriction, birth defects, learning problems, and social problems. At some point during the intervention, all of the subjects verbally described the lack of oxygen and nutrients due to vasoconstriction. In addition, all of the subjects correctly listed five problems an infant could have caused by prenatal exposure to the drug. Four of the subjects located, read, and summarized articles about "crack babies" and the problems they face. After observing a video showing "crack

babies", the group generated a list of twelve concepts they observed in the video. The list contained items such as tremors, seizures, undersize, and addiction.

As subjects played a game utilizing a handout from the March of Dimes, teams listed birth defects such as seizures, death, prematurity, and breathing problems. When six subjects wrote letters to their mother from the baby's perspective, they mentioned that the infant was tactilly defensive, cried a lot, was addicted to crack cocaine, and had learning problems. Eight of ten subjects listed brain damage as a problem due to prenatal exposure. Three of four subjects reported on a question guide that learning problems and "problems in school" are caused by exposure to crack cocaine. Also on the question guides, all of the subjects reported heart problems, deformed genitals, and brain damage. When asked to predict the future for the "crack baby" subjects working in two groups listed a total of 49 items which relate to birth defects, learning, and social problems. Birth defects appear to be referred to most often which leads the researcher to believe that this aspect of the goal was the best understood.

Goal 4 which addressed crack usage in the environment in relation to abuse and neglect of the infant was well understood by subjects. As the R.N. speaker led a discussion, three subjects talked about abuse in relationship to the mother's mood when craving the drug, foster care due to poor home care, and neglect . On question guides completed the day the nurse spoke, all subjects correctly stated that sidestream smoke is dangerous in that it further exposes the infant to crack cocaine. Two subjects verbally stated in class that sidestream smoke is dangerous. During a role play of the family, all subjects commented on the mother's temper, the infant's

crying, and the infant not being fed. They felt that the mother may physically harm or starve the infant. As subjects worked in two groups to brainstorm what the future looked like for the "crack baby", typical themes were abuse , abandonment, lack of love, maladjustment, and not being cared for. The researcher believes that all subjects have an understanding of why, when, and how abuse and neglect may occur.

Understanding the physical and psychological effects of crack cocaine on the mother in relationship to vasoconstriction, euphoria, and depression was the focus of goal 2. During class discussions, subjects discussed how vasoconstriction can cause a heart attack or stroke and the way in which premature labor and miscarriage can occur. As subjects played a game, miscarriage and early labor were addressed again. When the R.N. led a group discussion, four subjects talked about the mother becoming malnourished from a lack of food during the period of time in which she is under the effect of the drug. The depression she experiences as she "crashes" from the "high" was addressed during the role play as subjects acted out the anger, desperate need for the drug, and neglect of the infant and other children. When six subjects wrote letters to their mothers from the perspective of the infant/child, themes of premature birth and mother's addiction were common.

Finally, goal 1 relating to subjects' understanding of the physical characteristics of the drug and the medical reaction of stimulation upon ingestion will be discussed. During class discussions, all subjects described what the drug looks like. On written assignments, all subjects reported that it is smoked and acts as a stimulant when in the users system. As crack and its relationship to cocaine were

discussed during sessions, the researcher found it necessary to explain on two occasions that crack is made from cocaine by breaking the chemical bond and that crack cocaine is more potent than cocaine in its powdered form. The police officer who spoke to the group had described this process in greater detail. As he spoke, subjects appeared to be very attentive. Afterward, they asked questions about the flammable nature of the drug, legal aspects such as laws and jail time, and the aspect of breathing/respiratory problems due to smoke irritation and stimulation. They also were interested to know how the drug affected the brain and if it was addictive. By the completion of the intervention program, all of the subjects had reported either verbally during discussion or in a written assignment that crack cocaine is extremely addictive to the user and can cause death. Subjects understand what the drug looks like, how it is used, and the danger of the drug.

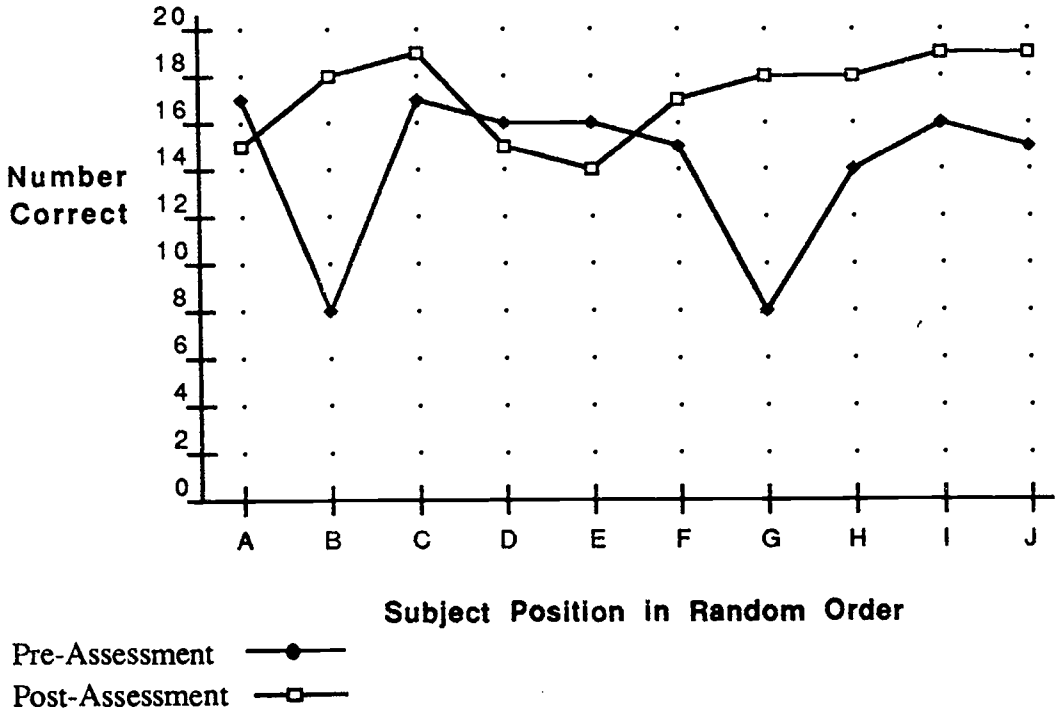
The above findings have been noted in a graph reporting pre- and post-assessment scores. *See graph attached. The subjects' pre- and post-assessment actual scores and percentages are reported in the table titled "Subject Information".

Limitations and Conclusions

The results of the study are limited. Three main limitations were: the small sample size, the length of intervention, and the knowledge base of intervention. A sample of ten is a very small group for research purposes because it does not allow for much variance. The sample used was heterogeneous and the three disability groups were enevenly represented. The intervention was seven days long including pre- and post-assessment days. This is a short time span to provide repetition and for mastery learning to occur. A knowledge based program increases

Pre-Assessment and Post-Assessment Scores

20-Item Crack Cocaine Assessment



Results: The mean score for the 20-question pre-test was 14.2 (75%) with the lowest score being 8 (60%) and the highest being 17 (85%). The mean score for the post-test was 17.2 (86%) with the lowest score being 14 (70%) and the highest being 19 (95%). On the post-assessment, one subject scored 1 point lower than on the pre-assessment, and two subjects scored 2 points lower. Two subjects scored 2 points higher, one scored 3 points higher, two scored 4 points higher, and two subjects scored 10 points higher than on the previous assessment.

Subject Information

Subject	Pre-Assessment		Post-Assessment		Percentage of Assignments Completed	Absences
	20 Items	Percentage	20 Items	Percentage		
A	17	89%	15	75%	100%	0
B	8	60%	18	90%	80%	0
C	17	85%	19	95%	20%	3.5 days
D	16	80%	15	75%	70%	3 days
E	16	80%	14	70%	80%	1 day
F	15	75%	17	85%	50%	3 days
G	8	60%	18	90%	90%	2 days
H	14	70%	18	90%	60%	1 day
I	16	80%	19	95%	100%	0
J	15	75%	19	95%	100%	0

Four subjects attended all of the sessions. Two attended nine of the sessions. One subject attended eight sessions. Two subjects attended seven sessions, and one subject attended 6.5 of the sessions. The researcher had hoped for higher attendance rates. Subjects were held accountable for all work missed due to absence.

understanding of the topic but does not produce a change in attitude andbehavior which may be desireable to deter drug abuse. The teacher had told the subjects prior to the start of the intervention that assignments would not be completed for a grade. As a result, the subjects lacked motivation to attempt or complete assignments and the only assignments that were completed by all ten of the subjects were done during the instructional class time. When the researcher discovered the suspected reason for the low motivation, extra credit was given for the percentage of completed assignments. For example, all ten completed assignments resulted in the grade of an "A". Upon completion of the intervention, three subjects completed ten (100%) of the assignments. The average number of assignments completed was 7.5 (75%). Perhaps the percentage would have been higher also if the intervention would have been several days longer leaving time each day for assignments to be worked on extensively in class since often special education students require extra help and prompting to complete classwork. The researcher had no control over the amount of days to conduct the intervention as she was not the regular teacher.

In conclusion, the group as a whole did increase their knowledge of crack cocaine and its effect on the child when introduced prenatally as supported by the increase in assessment scores over the period of intervention and subject self-reports demonstrates an increase. On the self-report data, 100% of the nine subjects answering felt that they had learned a lot about crack cocaine Pre-test scores were quite high showing a mean of 14.2 (75%). This is in the average range. Post-test scores were 17.2 (86%). An increase of 3.0 (11%) is a modest

gain.

As discussed in the results section, all subjects attained the four broad goals of intervention. They all increased their knowledge of the drug and understand the physical and psychological effects crack cocaine has on both the expectant mother and the fetus. Subjects also understand the relationship between the environment and abuse and/or neglect of the infant. This was demonstrated through verbal, written, and role playing participation during the intervention sessions. The findings of this pilot study are hopeful to suggest that a more intensive intervention of a longer duration ,using a larger sample needs to be systematically investigated.

References

Blair R.N., M.S.N. (1992, February). Cocaine and its effects on children exposed before birth from the prenatal period through school age. Cocaine and its Effects on Children Exposed Before Birth. Symposium conducted at the St. Clair County Community College, Port Huron, MI.

Browner M.D., K.J. and Anglin Ph.D., M.D. (1987). Adolescent cocaine use: epidemology, risk factors, and prevention. Journal of Drug Education, 17 (2), 163-181.

Capuzzi D. and Gross, D.R. (Eds.). (1989). Youth at Risk: A Resource for Counselors, Teachers, and Parents. Virginia: American Association for Counseling Development.

Chasnoff M.D., I.J. (1987). Perinatal effects of cocaine. Contemporary Obstetrics and Gynecology. May, 163-164, 169-170, 171, 175-176, 179.

Cook, P.S., Petersen PhD., R.C. and Tuell-Moore, Ph.D., D. (1990). Hazards of prenatal exposure to alcohol, tobacco and other drugs. In T.B. Haase (Ed.) Alcohol, Tobacco and Other Drugs May Harm the Unborn (p. 15-33). Rockville, MD: Office for Substance Abuse Prevention.

Falco, M. (1988, June). Preventing Abuse of Drugs, Alcohol, and Tobacco by Adolescents. (Available from [Carnegie Council on Adolescent Development, 11 Dupont Circle, N.W., Washington, D.C. 20036]).

Hillman Ph.D., S.B., Becker M.A., M.J., Ogilvie B.A., L.A. and Sawilowsky Ph.D., S. (1990). Survey Results of Use of Drugs and Alcohol Among High School Students. (Report No. CG022-613). Detroit, MI: Wayne State University, Laboratory for Research on Adolescence. Educational and Clinical Psychology. (ERIC Document Reproduction Service No. ED321-176).

Ingersoll, B. (1988, December 26). Crack traffic rolls out to every corner of the state. Detroit News, p. 1-2.

Kantrowitz, B., Winegert, P., DeLaPena, N., Gordon, J. and Padgett, T. The Crack Children. Newsweek, February 12, 1990, p. 62-63.

Koppleman, J. and Miller-Jones, J. (1989) Crack it's destroying fragile low-income families. Public Welfare. F 89, 13-15.

McCorry Ph.D., F. (1990). Preventing Substance Abuse: A Comprehensive Program for Catholic Educators. Washington, D.C.: National Catholic Education Association.

Meyer, T.J. (1986, July 16). 1 in 3 college students tries cocaine; study finds; Bennett urges presidents to crack down on drugs. The Chronicle of Higher Education., p. 1, 30.

Rist, M.C. (1990). The Shadow Children. American School Board Journal, 177 (1), 18-24.

Appendix A

Broad Goals of Intervention

Subjects will understand:

1. the physical characteristics of crack cocaine namely that it is off-white in color and resembles soap or rock salt and the medical reaction of when ingested, is that it acts as a stimulant.

2. the physical and psychological effect of crack cocaine on the expectant mother is vasoconstriction followed by euphoria and then depression.

3. the physical and psychological effect of crack cocaine on the fetus is vasoconstriction resulting in birth defects, learning problems, and social problems.

4. the impact of usage of crack cocaine by caregivers in the environment results in infant abuse and/or neglect.

Appendix A

Daily Schedule of Intervention (7 days)

Day 1 11:05-12:10

Topic: PRE-TEST
Pre-test, 30 minutes
Read brochure The Drug Crisis Among Us, Crack, 25 minutes
Write down three questions each to ask Police Officer, 10 minutes
legal aspects
characteristics of drug

Day 2 11:05-12:10

Topic: POLICE OFFICER SPEAKER
Collect subject questions, to ask police officer about crack cocaine
Pass out question guides, to ask police officer.
Pass back subject questions, to ask police officer about crack cocaine, 10 minutes
Police Officer Speaker, 50 minutes
characteristics of crack cocaine
description of use
description of users
explanation of laws
Collect any completed question guides, 5 minutes

Day 3 11:05-12:10

Topic: NEWSPAPER ARTICLE
Collect remaining question guides, from police officer speaker, 5 minutes
Read "The Littlest Victims", 30 minutes
addiction
vasoconstriction
birth defects
school problems
Subjects list five infant problems due to prenatal exposure to crack cocaine, 10 minutes
brain damage
seizures
small size
school problems
Explain Newspaper Article assignment, 10 minutes
summarize articles related to fetal exposure
Write down three questions each to ask R.N. nurse, 10 minutes
drug effects on expectant mother
characteristics of "crack baby"

Appendix A

Daily Schedule of Intervention Continued

Day 4 11:05-12:10

Topic: NURSE SPEAKER
Collect newspaper article assignments,
Collect subject questions to ask nurse,
Pass out question guides to ask nurse,
Pass back subject questions to ask nurse, 10 minutes
Registered Nurse speaker, 45 minutes
addiction
prenatal effects
physical effects
hospitalization
learning problems
Explain/Assign teams for brochure question, contest (hand-out game)
Pass out handout, Cocaine Use During Pregnancy
miscarriage
prematurity
brain damage
withdrawal
bonding
birth defects
Pass out word search, 10 minutes
terminology related to crack cocaine usage

Day 5 11:05-12:10

Topic: VIDEO TAPE
Collect question guides from nurse speaker,
Collect word search puzzles, 5 minutes
Brochure contest (handout game), 20 minutes
Video tape Cocaine's Children, 10 minutes
Infants' physical condition
Infants' psychological condition
Subjects write movie facts on chart paper, 10 minutes
Infant birth defects
Infant behavior
Infant Hospital environment
Subjects start letters to mother
One from baby two weeks old, 20 minutes

Appendix A

Daily Schedule of Intervention (7 Days)Continued

Day 6 11:05-12:10

Topic: ROLE PLAY
Collect letters,
Role play disfunctional "Crack Family", 30 minutes
relationships
crack cocaine usage
infant care
Two groups brainstorm list of future for baby, 20 minutes
Assign letters to mother by five year old, 5 minutes
behavior
health
relationships
home
school
Students share article summaries/letters with group, 10 minutes

Day 7 11:05-12:10

Topic: POST-TEST
Students share article summaries/letters with group, 15 minutes
Post-Test, 30 minutes
Students review tests,
Question/Answer Period for tests, 20 minutes

Appendix A

Lesson Plans Days 1-7

Day 1: 11:05-12:10

Objectives:

1. Subjects will demonstrate prior knowledge of/about crack cocaine by completing a teacher-made pre-assessment.

2. Subjects will gain additional generic knowledge about crack cocaine and increase curiosity about the drug by reading and reviewing a brochure on the subject.

Materials:

pre-assessment (see attachment), pencils, 3" x 5" size file cards, 12 brochures

(1990) The Drug Crisis Among Us Crack (Available from Riverside Drive [Port Huron Area School District, Port Huron, MI 48060])

Procedures:

1. Tell subjects, "You will be learning about a drug called crack cocaine, and before you study it, I'd like to find out what you already know about it. Today you will complete a pre-assessment. Read each question very carefully and choose the best answer. It is O.K. to not get every answer right. Are there any questions? Yes, you will have as much time as you need."

2. Pass out the assessment and say to the subjects, "Turn to the last page and look at the last five questions. This section is optional but it would be very helpful if you would answer the questions in the section. Your answers will be kept confidential. No one will report the answers to your parents or the principal."

Appendix A: Day 1 Continued

3. Allow subjects to work on the assessment, answering questions as needed but not helping with answers. Collect assessments as subjects finish.

4. When all subjects have finished , pass out the brochure The Drug Crisis among Us: Crack. Have subjects read the brochure as a group. Ask questions: Is crack addictive?, Yes; Is crack dangerous?, Yes; What does it do to your body?, You feel "high" and it is a stimulant. Point out the hot line numbers on the back of the brochure.

5. Tell subjects, "Tomorrow an officer from the police department will be coming to talk to the class about crack cocaine. Today each of you will be given a 3" x 5" card. Write three questions on the card that you want to ask or have answered by the officer tomorrow. Yes, you can ask whatever you'd like to know, use the brochure as a reference. List the questions 1, 2, 3 with 1 being the most important, 2 being the next important, and 3 being the next important. Try your best to formulate three questions. Think about addiction, use, what crack looks like, and legalities. The cards will be collected tomorrow at the beginning of the hour."

6. Dismiss class.

Evaluation:

1. Objective: Subjects will demonstrate prior knowledge of/about crack cocaine by completing a teacher-made pre-assessment.

All of the subjects completed the pre-assessment without any assistance except for some necessary help in reading questions and the mean score was 14.2(75%).

Appendix A: Day 1 Continued

The subjects completed the test in 20 minutes and 9 out of 10 of the subjects answered the questions in the optional section.

2. Objective: Subjects will gain additional generic knowledge about crack cocaine and increase curiosity about the drug by reading and reviewing a brochure on the subject.

All ten subjects read the brochure on crack and participated in a group discussion. During the discussion, one subject said,"I didn't know that crack was different than cocaine." and others nodded in agreement. Another subject appeared to be surprised to find that the drug is addictive. Three subjects ask the reseaarcher how much it cost to purchase and others were curious to know what "type" of people use the drug. Other questions relating to the physical effects of the drug and the prevalence of use in the local area were directed to the researcher. All of the subjects appeared to be interested in the topic as the brochure was read and discussed as they all participated in the discussion portion of the session.

Nine out of ten of the subjects each formulated three questions related to crack cocaine to ask a police officer speaker. As they wrote down their questions they asked for an input from the researcher in relation to if the questions were "good" or not. Six of the subjects looked back at the brochure as they worked. A list of the questions asked can be found in the appendix section of this paper

Appendix A: Day 1 Continued

Name_____
Class_____
Hour_____
Date_____

Crack Cocaine Pre-Assessment

Circle the best answer.
Read each choice carefully.

1. Crack cocaine is introduced into the body by
   a. needle.
   b. smoking.
   c. sniffing.

2. Young children exposed to crack cocaine can be
   a. withdrawn.
   b. hypersensitive.
   c. both a and b.

3. Crack cocaine constricts the blood vessels of the
   a. pregnant mother.
   b. unborn child.
   c. both a and b.

4. Unborn babies can be
   a. born early.
   b. miscarried.
   c. both a and b.

5. A vial of crack cocaine costs about
   a. fifty dollars.
   b. twenty dollars.
   c. ten dollars.

6. Crack cocaine looks like
   a. flour.
   b. rock salt.
   c. both a and b.

Appendix A: Day 1 Continued

7. You can become addicted to crack after
   a. one or two uses.
   b. twenty uses.
   c. ten or eleven uses.

8. Using crack cocaine in the same room as a baby can
   a. help him/her sleep.
   b. do no harm.
   c. harm a baby.

9. An unborn baby exposed to crack may
   a. have seizures.
   b. lack oxygen.
   c. both of the above.

10. Use of crack cocaine can cause
    a. heart attack.
    b. depression.
    c. both a and b.

Circle the best answer. T=true, F=false.

11. T or F Crack cocaine is not as potent (strong) as cocaine.

12. T or F Babies exposed to crack cocaine bond easily with their caretaker.

13. T or F An unborn baby is affected by crack cocaine each time the mother uses crack.

14. T or F Babies exposed to crack rarely cry.

15. T or F Sometimes babies exposed to crack cocaine shake and have tremors.

16. T or F After birth crack-exposed babies may be neglected or abused.

17. T or F Crack cocaine is a legal drug.

18. T or F Users of crack cocaine often use other drugs with the cocaine.

19. T or F Crack cocaine causes birth defects.

20. T or F Crack-exposed babies may have learning problems in school.

Appendix A: Day 1 Continued

The following questions are optional.
Answers will be kept confidential.
Please be honest.

1. I have used crack cocaine
   a. often.
   b. rarely.
   c. never.

2. T or F My friends use crack cocaine.

3. T or F I am curious to know more about crack cocaine.

4. T or F I would like to try crack cocaine.

5. T or F Crack cocaine is not very dangerous to the user.

Appendix A: Day 1 Continued

Crack Cocaine Pre-Assessment Answer Key

Multiple Choice	True or False
1. b	11. F
2. c	12. F
3. c	13. T
4. c	14. F
5. c	15. T
6. b	16. T
7. a	17. F
8. c	18. T
9. c	19. T
10. c	20. T

Appendix A: Day 1 Continued

Day 1 Subjects' Generated Questions to Ask Police Officer

1. How do you feel about crack?
2. How many kids in our town use crack?
3. Will you tell me more about crack?
4. How can it affect the brain?
5. How can it cause cancer?
6. What's it made of?
7. What happens when you do crack?
8. Do you drive the same way as you do when drinking?
9. What types of birth defects are caused?
10. Is it addictive?
11. What's a "five ball".
12. Is it flammable?
13. How hard is it to get off cocaine?
14. How do you use crack?
15. Can babies live?
16. Are the babies slower to teach?
17. How many babies live?
18. Does crack cause brain damage?
19. Can a mother be convicted of murder?
20. How many years of jail do you get for crack use?
21. Is crack bad for people with asthma?

Appendix A: Day 1 Continued

22. How does crack affect your brain?

23. Does crack affect your learning?

The above list of questions was generated by nine subjects and have been presented in the exact wording used by subjects. However, questions 1, 2 and 3 have been edited by the researcher to represent questions with similar content written by more than one subject. (Each subject generated three questions.) Question 1 was listed by three different subjects. Question 2 was listed by two different subjects and the third question was listed by two of the subjects.

Appendix A: Day 2

Day 2: 11:05-12:10

Objectives:

Students will understand:

1. the physical characteristics of crack cocaine.
2. the effects of crack cocaine on behavior of the user.
3. crack cocaine is made from powdered cocaine.
4. the legal repercussions of using crack cocaine.

Materials:

Officer from police department (officer will bring: the actual bring), student-generated questions on 3" x 5" cards, pencils, teacher-made questions guides.

Resource Person

Officer Paul M. Szczesny, 100 McMorran Blvd., Port Huron, MI 48060, (313) 984-9711.

A former undercover narcotic officer, he now works as a community services officer educating school students on the effects of drugs.

Procedures:

1. Collect subject 3" x 5" question cards and attempt to group them by question type. Copy down questions from cards for teacher use. Hand cards back to subjects.

2. Give each subject a question guide telling them to fill in the answers to the questions on the sheet and take notes as the officer speaks to the group. Tell subjects, " Ask your questions from your question cards also. Do you have any

questions? Yes, you can ask about his experiences arresting crack user/dealers." Allow time for subjects to read the question guide.

3. Introduce officer and allow him to speak and interact with the class. The officer passes a vial containing crack cocaine around the class. He gives a brief history of cocaine and describes how crack is produced by heating it us and breaking the chemical bond. He tells them that crack is a more potent form of cocaine. The physical and psychological effects of the drug are described. The effect on the fetus when the mother uses the drug is described. Examples from his personal experience are shared with the group. Descriptions of individuals experiencing withdrawal symptoms and examples of things people have done in order to obtain the drug are given.

4. Ask the officer the questions: What happens when you use crack? The drug acts as a stimulant. Can you describe a crack user's behavior when his "high" is over? The user is angry and depressed. Have you arrested a lot of people for crack cocaine use? Yes, the drug is prevalent in our city. Allow time for subjects to ask questions. Collect any completed study guides.

5. Ask questions: What did you think of some of the things the officer said today? Is crack addictive?, Yes; Is it safe to use?, No; How will crack make you behave?, irrational, angry, moody; How can it affect your life?, You may not be able to hold down a job or care for yourself. Yes, your friends may not want to be with you when you are crabby or suffering from withdrawl symptoms.

6. Dismiss Class.

Appendix A: Day 2

Evaluation:

1. Objective: Subjects will understand the physical characteristics of crack cocaine.

The subjects looked at crack cocaine in a sealed vial. As they looked at it, they made comments such as: It looks like soap., It looks like big pieces of salt., It looks like dirty rock candy., and It looks like stones. Nine out of ten of the subjects examined it for over thirty seconds.

2. Objective: Subjects will understand the effects of crack cocaine on the behavior of the user.

As the officer told first-hand stories about contacts with crack cocaine users (He spoke of people killing to get the drug, a mother smoking it while caring for her baby, and he talked about people going through withdrawal.), the subjects listened intently and later handed in the question guide sheet writing answers such as; people act crazy and they are "hyper" for the question relating to behavior. All of the subjects turning in the question guide answered the question correctly.

3. Objective: Subjects will understand that crack cocaine is made from powdered cocaine.

The officer told the subjects that crack is made when cocaine is heated up and the chemical bond is broken and it is much stronger and more addictive than plain cocaine. As he spoke they ask questions such as ; Can it be heated on a stove?,Is it broken into pieces after it cools? Subjects verbally stated that crack is made from cocaine that is heated up and two subjects stated that crack is made when the

Appendix A: Day 2 Continued

chemical bond in cocaine is broken. Seven of the subjects wrote on the question guide that crack was more powerful than powdered cocaine.

4. Objective: Subjects will understand the legal repercussions of using crack cocaine.

During his presentation the officer mentioned several times that he arrested people for using crack cocaine. Four subjects asked what the jail time was, and the officer told them up to life in prison if the person is selling and has large amounts. All of the subjects completing the guide wrote down that crack usage and selling can lead to jail time, a court hearing, or a fine. The subject who wrote down a fine when verbally questioned said that he meant court costs.

Appendix A: Day 2 Continued

Name_____
Class_____
Hour_____
Date_____

Question Guide for Speaker (Police Officer)

1. How is crack cocaine different from regular cocaine?

2. How is crack cocaine used?

3. Is crack cocaine addictive?

4. Do crack users often break the law?

5. How much does crack cocaine cost?

6. How do people act when they are "high" on crack?

7. Who uses crack cocaine?

8. Where do people get crack cocaine?

9. What happens when a person is arrested for selling crack cocaine?

10. What happens when a person is arrested for buying or using crack cocaine?

Appendix A: Day 3

Day 3: 11:05-12:10

Objectives:

Subjects will understand:

1. the effect that crack cocaine can have on babies exposed prenatally so that when asked they can independently list with 100% accuracy five problems that these babies may have after birth.

2. the impact of crack cocaine on babies prenatally and how widespread the problem is so that they can locate and write a summary of a current newspaper or magazine article relating to "crack babies".

Materials: paper, pencils, 3" x 5" file cards

"The Littlest Victims". (1991, October 4). Current Events, p. 1-2.

Marshall, S. and Hall, M. (1990, January 11). "Baby's Cocaine Overdose Probed". U.S.A. Today, p. 4.

Verdin T. (1992, February 16). "A Handful of Problems". Times Herald, p. 3

Breghar, M. (1990). "Crack Babies: Abused Before Birth". Science World, 46 (13), p. 8-12.

Procedures:

1. Hand back corrected question guides from yesterday. Ask subjects, "Do you have any questions?" Clarify any misconceptions or common mistakes subjects made on question guides. Crack is a more potent form of cocaine remember the officer talking about breaking the chemical bond? Yes

Appendix A: Day 3 Continued

2. Tell subjects, "Today you will be reading an article about crack-exposed babies. How do you think crack can affect a baby? (It can have birth defects). How does it affect a baby prenatally?(The baby gets "high"). What would these babies look like? (They looked deformed). What do they think these babies will act like? (They will be addicted or angry)."

3. Pass out copies of the Current Events article. Ask subjects to read the article quietly to themselves. When they have finished, have them take turns orally reading the article, asking them questions as they read: What kinds of problems might the babies in the pictures have? Breathing problems and they are too small. Why don't the mothers stop using crack? They are addicted to it. Why is it dangerous for the fetus' blood vessels to be narrowed? They can't get any oxygen. What would it be like to listen to the baby cry a lot? It would be annoying. Why does the baby cry? He/she is having withdrawal. What will the future be like for these babies? They may not have happy childhoods. They may be angry with their mothers.

4. After the article has been read and discussed, direct subjects to independently list five effects that crack has on a child when the mother uses crack during pregnancy. Say, "The effects should relate to problems that the babies may have because of the crack usage. Yes, try to use things that were discussed in the article." Collect all lists. * See attachment.

5. Assign subjects to go to the library during their study hour and find at least one article on "crack babies". Tell them, "You must read the article and write a two

Appendix A: Day 3 Continued

to three paragraph summary of it. The article can come from a newspaper or magazine. Use the Reader's Guide and look in the newspaper files." Have subjects help to verbally generate a list of possible sources. eg. Detroit Free Press, Time magazine. Write the list on the board. Specify that they must print the name of the article, author, date, and source on the summary and demonstrate on the chalkboard. eg. "Baby's Cocaine Overdose Probed" by Steve Marshall and Mimi Hall, U.S.A. Today, January 11, 1990. Use articles brought to class. Tell them, "The citation is necessary because someone may read your summary and want to locate the article because they are interested in it. The article summaries are due tomorrow."

6. Tell class that tomorrow an R.N. from Port Huron Hospital will be coming to talk about the affect crack has on the user, the unborn child, and the child after it is born. Hand out 3" x 5" cards and tell them, "Think about what you would like to know and write three questions down that you could ask the nurse." Tell them to have question 1 be the most important to them, 2 be the next important, and 3 be the next important. Suggest that they reread today's article to help them focus in on questions to ask. Yes, you can ask if she has worked with "crack babies". Look at the pictures in the article. What types of machines are being used to care for the baby? Yes, ask her to describe the hospital stay and equipment used to help these babies.

7. Dismiss class.

Appendix A: Day 3 Continued

Evaluation:

1. Objective: Subjects will understand the effects that crack cocaine can have on babies exposed prenatally, so that, when asked,they can independently list with 100% accuracy five problems that these babies may have after birth.

Eight of the subjects were present and all participated with 100% accuracy. Each subject correctly and independently listed five effects on the fetus. This was done during the class session. All lists of items can be found in the appendix.

2. Objective: Subjects will understand the impact of crack cocaine on babies prenatally and how widespread the problem is so that they can locate and write a summary of a current newspaper or magazine article relating to crack babies.

Seven of the subjects completed this assignment, handing in summaries and copies of the articles. Four used newspapers and three used magazines and all of the articles were different. Four of the articles pertained directly to crack-exposed babies and the other three were about crack cocaine use in general. Two subjects added personal feelings to the summary. Subjects appeared to have had difficulty with the process of "writing" a summary. Summaries were not written throughly but a ll of the subjects could verbally describe the content of the article they had chosen. * Sample work can be found further in the appendix.

Appendix A: Day 3 Continued

Day 3 Lists of Problems Babies Can Have Due to Prenatal Crack Exposure

Problem or Area	Number of Times Listed
1. brain damage	8
2. heart stops	1
3. nerve damage	4
4. deformed kidney	2
5. don't like to be looked at	1
6. become addicts	5
7. heart disorder	6
8. don't want to be picked up	1
9. still born	4
10. cry	5
11. have seizures	3
12. undersized	2
13. sex organ problems	1
14. small blood vessels	1
15. sores on brain	2
16. can't breath	2
17. hearing impaired	1
18. blood supply cut off to a limb or organ	1

Appendix A: Day 3 Continued

Day 3 Article Summaries

Sample #1

"Baby's Cocaine Overdose Probed"
(Date: January 11, 1990) By: Steve Marshall and Timi Hall

"Micheala Robinson was born with cocaine in her system and died at six months because someone either blowed it in her face or spiked her bottle. When they found it in the baby's body, they took her other two kids away. Kelsey Curry says that there are a lot of boarded up crack houses that are dangerous at night. There are kids and other people getting killed because of drugs."

Sample #2

"Crack Holds Double Standards"

"In Michigan last year, about three times more men then women were in residential programs for treatment of crack cocaine addiction, according to the state office of Substance Abuse Service."

Appendix A: Day 7 Continued

Day 3 Subjects' Generated Questions to Ask Nurse

1. What do they use for a substitute for crack addicts?
2. Is it hard to break someone off crack?
3. How many come back over and over?
4. Do you see a lot of people on crack?
5. How do you react when you see crack users?
6. Is it flammable?
7. Is crack only white or other colors?
8. Is it hard to get?
9. How many crack babies do you see daily?
10. How long do crack babies stay in the hospital?
11. How is the heart affected by crack?
12. How does crack affect a baby?
13. What can crack do to you?
14. What does crack do to your brain?
15. Do more black people use crack than white people?
16. Have you ever seen a baby and then it died after a while?

Appendix A: Day 4

Day 4: 11:05-12:10

Objectives:

Subjects will:

1. complete a teacher-made word search using terminology related to crack cocaine.

2. understand the effects of vasoconstriction on the mother and the fetus.

3. understand that crack cocaine exposure prenatally can cause learning problems in children.

4. understand that prenatal crack exposure can cause birth defects.

5. understand the danger of sidestream smoke.

6. understand that crack-exposed babies may die from miscarriage, early delivery, or S.I.D.S.

Materials:

cowboy hat, three slips of paper each with one question from the information sheet written on them, subject-generated questions on 3" x 5" cards, teacher-made question guide

(1989). Cocaine Use During Pregnancy. (Available from [March of Dimes Birth Defects Foundation, 1275 Mamaroneck Avenue, White Plaines, NY 10605])

Resource Person:

Julie Walding, R.N., Port Huron Hospital, Chemical Dependency Unit, 1001 Kearney Street, Port Huron, MI 48060, (313) 989-3343.

Appendix A: Day 4 Continued

Ms. Walding works in the Chemical Dependency Unit of a local hospital. She has been doing this type of nursing for a number of years. She works with all types of substance abuse. One of her job duties is to give educational presentations to groups in the community.

Procedures:

1. Collect yesterday's newspaper summary assignment.

2. Give each subject a question guide saying, "Fill in the answers to the questions on the sheet and take notes as the nurse speaks. Ask questions from your question cards also. Do you have any questions? Yes, she has worked with drug addicts." Allow time to read the guide silently.

3. Collect yesterday's 3" x 5" cards and attempt to group them by question type. eg. Six subjects may want to know if the babies have any birth defects. Copy the questions for teacher use, then hand cards back to subjects.

4. Materials consisting of pictures of "crack babies", crack cocaine, drug vials, and other drugs is set up in the classroom by the nurse. Introduce the nurse and allow her to speak and interact with the class. Sidestream smoke is defined by the R.N. as smoke being breathed in by the child or baby as a person smokes crack near the child. Sidestream smoke is described as dangerous because it has the same affect on the child as it has on the smoker. Vasoconstriction and the way in which it cuts off oxygen and nutrients to the fetus is described and the effect of stimulation is described in relationship to heart attacks. Polydrug use is defined as a use of other drugs with crack cocaine. The crack users moods during "crash"

Appendix A: Day 4 Continued

periods is described as, angry and depressed. Examples from nursing experience are presented to the group. Babies in the intensive care unit are discussed; heart monitors, respiratory machines and intervenious epuipment is described by the nurse.

5. After the nurse leaves, answer any questions the subjects may have. Yes, you will have to turn in the question quide tommorrow. No, the hospital does not allow the general public in to observe addicted babies.

6. Ask questions: Why do "crack babies" cry a lot? Their central nervous systems are disrupted by the drug. What causes them to be born early? The crack causes the uterus to contract. How does crack physically affect the mother? It speeds her up and removes her appetite. How does crack physically affect the baby? They can't get oxygen and nutrients and they may have seizures. In what ways does crack cocaine continue to affect the baby after birth? They cry and have trouble getting along with other kids. Name some birth defects caused by crack cocaine usage.; heart defects, brain lesions, brain damage, deformed limbs

7. Collect the completed study guides.

8. Pass out the information sheet from the March of Dimes, Cocaine Use during Pregnancy and allow several minutes for them to look over the hand-out.

9. Divide subjects into three groups and put three questions from the informational sheet in the cowboy hat. Ask a subject from each group to draw a question card from the hat. Tell them, "Mark your brochure with a * next to your question." Collect cards and write subject names on the back. Tell subjects, "Your

Appendix A: Day 4 Continued

group is responsible for giving a verbal summary of the answer to the question you picked." Use the question "What is the March of Dimes doing to address the problem of cocaine use during pregnancy?" as a demonstration question. Tell subjects, "Read it silently then write down as many points as you can remember without looking." Have subjects read back their answers listing them on the board in numerical order. The list consists of studying the effect on pregnancy, conferences, radio and T.V. programs, and education programs.

Tell them that tomorrow the team that can list the most points about their question will win a prize.Offer the question "How can a woman protect her baby from the dangers of cocaine?" to individuals who want to earn three points of extra credit. Telling them" read it tonight and write down the points tomorrow in class."

10. Hand out the word search "Crack Cocaine" and assign it as homework due tomorrow. Read the terms on the worksheet to subjects; S.I.D.S. means sudden infant death syndrome, stillborn means born dead, malnourished means lack of nourishment.

11. Collect any finished question guides.

12. Dismiss class.

Evaluation:

1. Objective: Subjects will complete a teacher-made word search puzzle using terminology related to crack cocaine use to promote retention of actual materials.

All of the subjects correctly completed the word search. Three subjects asked what "polydrug" meant, two asked what the word "passive" meant , one asked

Appendix A: Day 4 Continued

what "undersized" meant, and one asked what "S.I.D.S." was.

2. Objective: Subjects will understand the effects of vasoconstriction on the mother and the fetus.

During a group discussion, vasoconstriction was discussed. All of the subjects made comments relating to the possibility of a heart attack in the first two minutes of use and comments relating to the fetus' lack of oxygen and nutrients during the time of crack cocaine use. Three subjects commented that birth defects could happen at this time. One said that babies could be malnourished and another said that babies could have seizures or a heart attack. Three of them began to discuss the aspect of the placenta pulling away from the uterus.

3. Objective: Subjects will understand that crack cocaine exposure prenatally can cause learning problems in children.

Of the four subjects who turned in the question guide, three stated learning as problems for crack babies. The three subjects in group one for the question contest listed brain damage on their list and talked about learning disabilities and retardation. The four subjects in group three also listed brain damage.

4. Objective: Subjects will understand that prenatal crack cocaine exposure can cause birth defects.

Both group one and group two listed several birth defects on their lists for the question game. All four of the subjects completing the question guide listed specific birth defects: heart problems, brain damage, missing fingers, deformed genitals.

Appendix A: Day 4 Continued

5. Objective: Subjects will understand the danger of sidestream smoke

Four subjects handed in completed question guides and all four correctly answered question two, stating that the baby inhales the smoke and could become addicted. During a class discussion two other subjects verbally stated that sidestream smoke was dangerous and one compared it to prenatal exposure in relation to impact to the fetus.

6. Objective: Subjects will understand that crack-exposed babies may die from miscarriage, early delivery, or S.I.D.S.

During the question contest group two listed S.I.D.S., groups one and three listed miscarriage, and group one and three listed born early. While working on the lists for the game two subjects asked the researcher what caused the early birth referring to how the placenta pulls away and the uterus contracts.

Appendix A: Day 4 Continued

Name_____
Class_____
Hour_____
Date_____

Question Guide for Speaker (Registered Nurse)

1. What effect does crack cocaine have on the person taking it?

2. What does crack cocaine do to a baby who is in the same room where it is being smoked?

3. What does crack cocaine do to unborn babies?

4. How do babies exposed to crack cocaine act?

5. Can crack cocaine cause learning problems for children?

6. Can a baby be born addicted?

7. What do babies exposed to crack cocaine look like?

8. Can crack cocaine cause death?

9. Are crack cocaine babies in the hospital longer than other newborns?

10. What kinds of problems do these babies have?

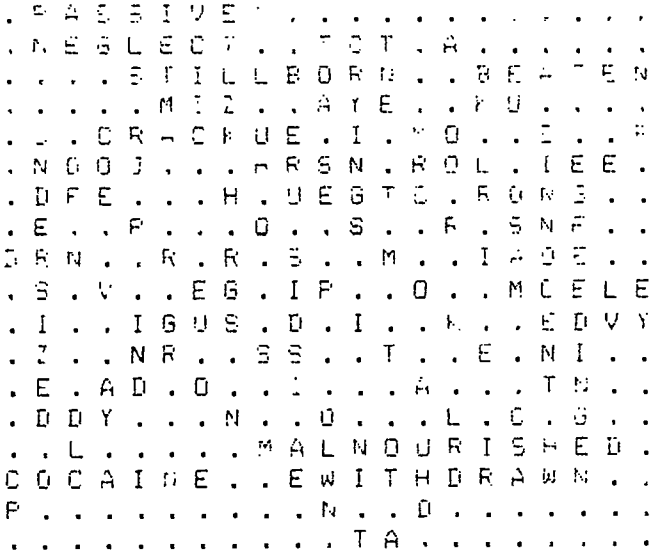
Appendix A: Day 4 Continued

Can you find these words?

MALNOURISHED	ENVIRONMENT	UNDERSIZED
DEPRESSION	DEFORMITY	ADDICTIVE
WITHDRAWN	DANGEROUS	STILLBORN
HOSPITAL	POLYDRUG	SEIZURES
INNOCENT	COCAINE	NEGLECT
TREMORS	PASSIVE	FEEDING
CRYING	STROKE	LONELY
BEATEN	HEART	ANGER
SMOKE	CRACK	ABUSE
CRIME	SIDS	JAIL

Appendix A: Day 4 Continued

Answer Key for: CRACK COCAINE



Appendix A: Day 5

Day 5: 11:05-12:10

1. Objective: Subjects will understand the health-related effects of crack cocaine on an unborn child so that when ask he/she can independently write a letter to the mother from the infant's point of view.

Materials:

three packs of gum, VCR, marker, chart paper, pencils, and writing paper

Chasnoff, Dr. I. (speaker/researcher). (1990). Cocaine's Children [Video]. White Plains, NY: March of Dimes Birth Defects Foundation.

Procedures:

1. Collect yesterday's word search puzzles and any question guides not passed in yesterday. Pass back corrected guides.

2. Break subjects back into groups for the question game. Write the four questions from the informational sheet (handout) on the board. Have a spokesperson from each group read the question. Allow subjects from the group to verbalize their answers and list them on the board under each question. Subjects verbally compare lists. Are some of your answers related? Yes, all three groups have mentioned specific birth defects and health problems. Ask individuals to volunteer to answer the extra credit question and list the answers on the board. Tally up group points the prize will equal one pack of gum for each subject in the winning group. Pass out the gum. They can chew it in class.* See attachment for a complete list of subject responses.

3. Tell subjects thatnow they will watch a video about crack-exposed babies.

Appendix A: Day 5 Continued

Ask them, What do you think you will see? Babies who are addicted. What will the babies look like or act like? They'll act sick. Do you think the babies will be home or in the hospital? They might stay in the hospital a long time because they are sick. What types of equipment might be used for the babies' care? They might need incubators. Think about their underdeveloped lungs and small size. Yes, you might see breathing machines and incubators.

4. Play the video tape. During the video define or point out highlights. When the six year old appears on the screen say, "Watch how he acts here. Listen to what his mother says. Yes, she is sorry for using the drug. What are the tubes for? Yes, they are for breathing. How old does that baby look? Yes, it does look like it was born early. Look at how small that one is. Look at the baby's body shake. See how stiff his body is."

5. Watch subject facial reactions and posture during the video. Record observations for later report in researchers diary.

6. Using the chart paper hanging on the wall, have subjects come to the front of the room and list what they saw on the movie. * See attachment for list of responses.

7. Ask questions: What did the first baby look like? Yes, he was small and looked sick. What types of problems do these babies face? They could die or stay in the hospital a long time. How do you think they feel? Alone and sad to be so sick. How do you think their mothers feel? She may feel guilty or crave more crack. What do you think the future looks like for these babies? It depends on if

Appendix A: Day 5 Continued

the mother continues to use crack or not.

8. Tell subjects, "Your assignment is to pretend that you are a crack-exposed baby. You will write letters to your mother reflecting life two days after birth. What do the tremors feel like? What about the crying or withdrawal? Name some other problems like sucking difficulty, heart problems, strokes, and seizures."

9. Pass out pencils and paper allowing subjects to work until the end of the class period.

9. Dismiss class.

Evaluation:

1. Objective: Subjects will understand the health-related effects of crack cocaine or an unborn child so that when asked he/she can independently write a letter to the mother from the infant's point of view.

As a group subjects dictated a list to the researcher of eleven characteristics of crack babies. * See attachment. The subjects did not receive much time to work on their letters in class and as a result only six of the subjects completed a letter. One subject stated in his letter that he was still in the hospital and another stated that he was born early. Four talked about being addicted and one told her mother that her problem was much bigger now that she had a baby. One subject went into detail describing the crying visual sensitivity, and tactile defensiveness of the infant. Four of them asked, " Why Mom? Why did you do this to me?"

Appendix A: Day 5 Continued

Brochure Contest (Handout Game) Lists

Group 1: How does cocaine hurt an unborn baby?

1. serious health problems
2. born too small
3. born too early
4. neurological problems
5. respiratory problems
6. jittery
7. underdeveloped lungs
8. underdeveloped heart
9. irritable
10. emotional problems
11. socially disordered
12. bonding problems
13. malformations
14. stillborns
15. miscarried
16. sex organs deformed
17. brain damage

Group 2: How does cocaine use during pregnancy affect newborns?

1. brain dead
2. small
3. deformed kidney
4. small head
5. tremors
6. S.I.D.S.
7. chronic health problems

Group 3: What other problems are faced by babies whose mothers used cocaine during pregnancy?

1. cause miscarriages
2. cause labor
3. cause unborn baby to die
4. cause irreversible brain damage
5. baby has stroke
6. three times more likely to be premature
8. smaller size
9. placenta pulls away
10. abrupt placenta = extensive bleeding
11. fatal for mother and baby
12. seizures
13. heart attacks

Appendix A: Day 5 Continued

Observations from Video, Cocaine's Children

1. tremors
2. undersized
3. cry a lot
4. heart deformity
5. not healthy
6. malnourished
7. sensitive to touch (hypersensitive)
8. addicted
9. visual stimulation (eyes closed)
10. looked cold
11. seizures
12. do not sleep

Appendix A: Day 5 Continued

Sample Letters at Two Weeks Old

Sample #1:

"Mom,

This is your daughter that is going through hell because of what you did when you were still pregnant. you don't care about anyone but yourself all you do is smoke crack you never feed me right you don't want to love me. When you do try to love me you get mad because I won't let you hold me or I won't look at you or I can't stopcrying. It is not my falt your the one who messed me up. All I know is when I and if I get better you better have an explanation why you would do this to your own kid well right now I am getting shots so I can calm down and sleep for about 2 or 3 minutes. Thanks alot for the crappy life.

Your crack daughter"

Sample #2:

"Dear Mom

Why did you have to smoke that crack why you pragnet for me. I am still in the hospital why you are home smoken crack. Well I hope you die!

Your son"

Appendix A: Day 6

Day 6: 11:05-12:10

Objective:

Subjects will understand:

1. the impact of cocaine use in the environment of a young infant/child in relationship to health and socialization problems so that they can brainstorm a list of possible outcomes for the child's future.

2. the environmental effect of crack cocaine in relationship to abuse/neglect of a young child so that they can write a letter to their mother from the child's point of view.

Materials: doll that cries like a newborn, blanket, bottle, phone, signs for subjects to wear, eg. co-dependent, father, dependent mother, hero, mascot.

Procedures:

1. Collect subjects letters due from yesterday.

2. Ask, "What do you think it would feel like to live in a family with a crack user in the house? Today you will be role playing the parts of family affected by crack cocaine use. I will help you to act. As you act, I'll be making suggestions." Ask the following questions about crack: What is crack? It is a drug made from powdered cocaine. How does it make people feel? It makes them feel stimulated and then relaxed. How does drug use by a member of the family affect the rest of the family? No one does the laundry and people are afraid of the user.

3. Review the family system with the class by defining the following roles: (Subjects have role played in this fashion related to alcoholism.)

Appendix A: Day 6 Continued

Crack dependent mother: What the mother is like? She is lonely, depressed, and egocentric. How does she act when she is using the drug? she may ignore her kids and be angry, depressed, or unreasonable. Does she eat much or regularly? No. What type of care does she give her children? Probably not very consistent or loving care.

Co-dependent father: What is his role? He covers up for the mother. Does he lie? Yes. Is he probably an X-user or a user also? Yes. Does he assume the roles of mother and father? Yes , he cooks and works too.

"Does the father become angry with the mother?" Yes, fight a lot.

Hero Child: What is his/her role? Does he/she help out a lot? Does he/she do a lot of household chores? What type of person is this child? Does this child help take care of younger siblings?

Mascot Child: What is he/she like? Does he joke a lot? Does he/she pretend there is no problem? Does he/she use crack also? Does he/she do poorly is school?

Baby: What does the baby act like or look like? Does this baby have medical problems from pre-birth exposure to crack cocaine? Does the baby have feeding problems?

4. Introduce the doll that cries like a newborn and let the group hear it cry. Assign the four family member parts having subjects not placed in roles be the audience. Tell subjects, "Using the props and the information you know about crack, you are to act out a day in the life of this newborn baby. The day starts with the whole family getting ready for school and work."

Appendix A: Day 6 Continued

5. Subjects act impromptu with coaching and suggestions from the researcher. (Every time a noise is made or someone raises his/her voice the doll baby will cry a shrill newborn cry.) How does dad feel when he has to get everyone ready for school? He feels responsible for everyone and overwhelmed. How does mom feel when the baby keeps crying and will not eat? She is frustrated with the situation and wants more crack. Are the other children getting any attention? No, the parents are too busy taking care of the baby and fighting. *See researchers diary in appendix B.

6. After the subjects have acted out the entire day lead a class discussion. How did you feel about the crying? Yes, it is irritating. Do you think this baby will be held and cuddled a lot? No. Does the baby 'get fed' regularly? No. Can dad do 'it all'? No, he has to work. Is the baby safe with the mom when she is using? No, because she ignores it and then later is crabby and angry.

7. Split the class into two groups. Tell them, "Each group will talk about the baby and generate a list of consequences for the baby. What will happen to this baby?" He might die. What will tomorrow bring? Maybe foster care. Will the mother stop using? She might stop or she might die. The dad will probably leave and take the baby away.

8. Give the groups ten minutes to work. Listen to and assist each group as they discuss the topic.

9. Ask a spokesperson from each group to copy their list onto the board. Why is the baby neglected? The mother is too busy getting "high". What is causing

Appendix A: Day 6 Continued

learning problems? The sidestream smoke and brain damage. What harms the bonding process? The crying, the birth defects and the mother's lack of positive responses to the baby.

10. Ask subjects to make suggestions as to how further damage to the baby can be prevented. The baby may be removed from the home. The baby can be fed more regularly and the mom should stop using crack.

11. Instruct subjects to once again take the babies point of view and write a letter to their mother. Say, "Now the child is five and preparing to enter kindergarten. Use the information that you have and think about things like not understanding directions, behavior problems, having a mother who is in trouble. Your letters are due tomorrow."

12. Allow subjects time to share their news article summaries and letters with the class if they'd like to. Subjects will read or just talk about the articles. Tell them their work was interesting.

13. Announce to the class, "Tomorrow you will have a post-assessment on crack cocaine. I suggest that you reread the articles, question guides, and brochures that you have. Yes, it will be just like the pre-assessment."

14. Dismiss class.

Evaluation:

1. Objective: Subjects will understand the impact of cocaine use in the environment of a young infant/child in relationship to health and socialization problems so that they can brainstorm a list of possible outcomes for the child's future.

Appendix A: Day 6 Continued

The class was divided into two groups. Group one listed 30 possible outcomes and group two listed nineteen. Outcomes covered a very wide range from physical problems to learning difficulties to interpersonal problems. They looked at life for the child up into the teenage years although they were instructed to look at the young child's life. * See lists attached

2. Objective: Subjects will understand the environmental effect of crack cocaine in relationship to abuse/neglect of a young child so that they can write a letter to their mother from the child's point of view.

Six subjects completed the assignment (the same six who completed the previous letter assignment). The five who did not complete it have low reading levels. Perhaps they were uncomfortable with the writing portion. One of the subjects writing a letter wrote that the mother was no longer a user. Another wrote that the mother just doesn't care about her in terms of health. One girl said in her letter that she was in school and had problems learning. Another said she was in school and had no friends but mom was no longer using crack. Another subject wrote about being angry with the mother for using and damaging her. All of the letters focused on the mother's use and how it affected the child.

During the role play situation, the baby was passed from one person to another and feeding problems were discussed. Neglect and abuse were addressed as the mother's temper flared up and her need for the drug lead her to leave the baby. One subject stated, "The crack is more important than the baby."

Appendix A

Day 6: Brainstormed Lists of Possible Outcomes

for the Crack Cocaine Baby's Future

Group 1

1. trouble interacting with others
2. trouble learning at a normal level
3. unhealthy eating habits
4. social problems
5. hate mother
6. addicted
7. bad grades
8. don't care about anything
9. could wonder "why them"
10. moody
11. abandoned
12. maladjusted
13. nerve damage
14. poor motor skills
15. could be a runaway
16. no one there for them
17. abused
18. still may be visually sensitive
19. get into a lot of trouble
20. could not be handled (behavior problems)
21. can't sleep
22. not talkative
23. may not care what they look like
24. may not want to live
25. may not feel loved
26. may not be loved
27. uncooperative
28. unhappy
29. don't talk to other children
30. don't talk to other siblings

Appendix A: Day 6 Continued

Brainstormed List for Possible Outcomes for the Crack Cocaine Baby's Future Continued

Group 2

1. addicted
2. could die
3. antisocial
4. hate parents
5. learning disability
6. don't know as much (low I.Q.)
7. foster parents
8. abandoned
9. moody
10. never be able to have kids (malformed sex organs)
11. jail
12. run away
13. bad grades
14. protective (withdrawn)
15. hypersensitive
16. can't sleep
17. codependent
18. fights
19. can't walk right (motor problems)

Appendix A: Day 6 Continued

Sample Letters at Five Years Old

Sample #1:

"Mom,

Hello! I am 5 years old today I have been in school a couple of months. I am glad that you are not useing crack cocain anymore. But my life is not any better. I am not doing very well in school. I get into alot of fights because I hate it when people look at me. I am lonly and I don't have any friends because I don't like to be alone. That is just one of the things that happed because of crack. continue to stay off crack and one day maby we can be together.

Your Daughter"

Sample #2:

"Dear Mom,

Do you know that you are tying to hurt me. But I guess you don't care about me. I could end up Brain Damge or my heart could stop but do you care. No you don't.

Love

Your Daughter"

Appendix A: Day 7

Day 7: 11:05-12:10

1. Objective: Subjects will demonstrate knowledge of/about crack cocaine by completing a teacher-made post-assessment.

Materials: post-assessment, pencils

Procedures:

1. Collect letters to mother.

2. Researcher says, "You can share your article summaries and letters with the group if you'd like to. Please feel comfortable, you can sit or stand. If you'd like, I'll read it for you and you can remain anonymous. Your letters were very good and so were your summaries." Subjects volunteer and share their work. Comments are made: Oh, I saw that article., Let me see the picture.

3. Tell subjects that today they will have their final assessment on crack cocaine. Tell them that the information on the assessment is the same as the pre-assessment they took only the questions are different. Remind subjects to read each question carefully and choose the best answer. Tell them, "Again there is an optional five-question section at the end. Thank you for answering on the pre-assessment , your answers will be kept confidential. The information you provide will be very helpful in letting me know if the goals of my teaching have been met. Are there any questions? Yes, you will have as much time as you need."

4. Pass out the assessments and allow subjects to work on them answering questions as needed but not helping with answers.(collect tests as they are finished)

Appendix A: Day 7 Continued

5. Pass back corrected assessments and allow five minutes for subjects to look them over. Lead a discussion of the results explaining answers were needed: Crack looks like rock salt because it consists of small white chunks. Yes, a crack-exposed baby can be either quiet and withdrawn or crabby and crying; however we tend to notice the crying babies more. Remember crack cocaine is stronger than powered cocaine because it is a purer form of the drug.

6. Tell subjects, "This ends your study on crack cocaine. What parts did you feel were the most meaningful and interesting. I'm glad you liked the video and the speakers , they were very interesting. I value your input and may use your ideas or comments when I teach this subject in the future."

7. Dismiss class.

Evaluation:

1. Objective: Subjects will demonstrate knowledge of crack cocaine by completing a post-assessment.

All of the subjects completed the assessment. The mean score was 17.2(86%). This is an increase of 3.0 (11%) from the pre-assessment. Two subjects who scored very low on the pre-test scored in the upper range on the post-test. These two subjects increased their scores by 10 points (60% to 90%). Three subjects scored slightly lower on the post-assessment than on the pre-assessment. The room was very warm on the day of the post -assessment and there was noise in the hall All three of the subjects refused help with the reading of the questions and when ask to reread and "double check" their answers they quickly looked through the

Appendix A: Day 7 Continued

pages. They did not appear to be rereading the items. Two of them suffer from attention deficit disorder and the third is certified educable mentally impaired Perhaps their attention was focused elsewhere or the reading was too difficult or perhaps they scored higher on the pre-assessment by chance.

Appendix A: Day 7 Continued

Name_____
Class_____
Hour_____
Date_____

Crack Cocaine Post-Assessment

Circle the best answer.
Read each choice carefully.

1. Unborn babies are affected by crack cocaine when the mother uses it
   a. once.
   b. three times.
   c. ten times.

2. Babies exposed to crack cocaine can be
   a. quiet/withdrawn.
   b. crabby/crying.
   c. either a or b.

3. Crack cocaine-exposed babies
   a. sleep a lot.
   b. have tremors.
   c. both a and b.

4. After birth crack-exposed babies may
   a. be abandoned.
   b. be abused.
   c. both a and b.

5. In school crack-exposed babies may have
   a. trouble eating.
   b. learning problems.
   c. both a and b.

6. Crack cocaine causes
   a. birth defects.
   b. miscarriages.
   c. both a and b.

7. After birth most crack cocaine-exposed babies have
   a. trouble bonding.
   b. no problems.
   c. none of the above.

Appendix A: Day 7 Continued

8. Crack cocaine usage can cause
   a. depression.
   b. heart attacks.
   c. both a and b.

9. Before birth crack cocaine usage can effect a baby's
   a. food supply.
   b. oxygen supply.
   c. both a and b.

10. Many crack-exposed babies suffer from
   a. constipation.
   b. seizures.
   c. blood disease.

Circle the best answer.

11. T or F Crack cocaine is usually smoked.

12. T or F Crack cocaine looks like rock salt.

13. T or F Users of crack cocaine usually use other drugs, too.

14. T or F Crack cocaine is addictive only after it is used many times.

15. T or F Crack cocaine costs about ten dollars.

16. T or F It is illegal to use crack cocaine in the United States.

17. T or F Cocaine is stronger than crack cocaine.

18. T or F It is safe to use crack cocaine in the same room as a baby or young child.

19. T or F Crack cocaine is dangerous to unborn children because it constricts the mother's blood vessels.

20. T or F Unborn babies can be born early if the mother uses crack cocaine.

Appendix A: Day 7 Continued

The following questions are optional.
Answers will be kept confidential.
Please be honest.

1. Using crack cocaine is
   a. not dangerous.
   b. somewhat dangerous.
   c. very dangerous.

2. T or F I have learned a lot about crack cocaine in this class.

3. T or F I am curious to learn more about crack cocaine.

4. T or F I would like to try crack cocaine.

5. T or F I will tell my friends not to use crack cocaine.

Appendix A: Day 7 Continued

Crack Cocaine Post-Assessment Answer Key

Multiple Choice	True or False
1. a	11. T
2. c	12. T
3. c	13. T
4. c	14. F
5. b	15. T
6. c	16. T
7. a	17. F
8. c	18. F
9. c	19. T
10. b	20. T

Appendix B

RESEARCHERS DIARY

Day 1: 11:05-12:10

The subjects entered the classroom and after several minutes of shuffling around, handing paper in, and talking to the teacher, they all sat down. The teacher took the attendance and introduced each subject to the researcher. Together the teacher and researcher explained to the class that for the next seven days they would be learning about crack cocaine. The pre-assessment was explained and passed out. Subjects were asked to do their best on the assessment and were told that they were not expected to know all of the information. One subject said, "Man, I know all about cocaine." The others chuckled. Most of the subjects completed the pre-assessment in about 20 minutes. The regular teacher had to read the questions to one subject as the rest worked quietly. Two subjects covered their answers while they worked on the five optional questions at the end. After the tests were handed in, they were told that tomorrow a police officer would be here to speak to them. Two boys looked at each other, smiled, and raised their eyebrows. It was explained to the class that later they would be asked to write down three questions to ask the officer about crack. The brochure, The Drug Crisis Among Us :Crack, was passed out by the teacher, and the researcher explained that it would be read out loud and discussed reminding them to keep in mind the questions they would write. As the class took turns reading aloud, one subject said, "I don't read out loud." The researching teacher replied, "That's okay. I can tell you're following along. I never force anyone to read out loud." Another subject read over

Appendix B: Day 1 Continued

A third of the brochure. Everyone appeared to be following along and several asked questions as the facts were read. One subject asked if crack was the same as cocaine and another asked if it was addictive.

After the brochure was read, the subjects asked for their index cards and began to write down the three questions they wanted to ask the police officer. Three of the subjects asked the researcher if their questions were okay. Their questions were very good. They had thought about them. As they wrote they'd pause and several looked back at the brochure. They asked a variety of questions and all handed in the cards before they left. Six of the subjects asked either the teacher or the researcher to read the questions.

They stood and waited, watching the teacher for an expression or input. Before class was dismissed, one of the subjects asked, "What are we gongs do while we work on crack?" The researcher told him, "Oh, a lot of things. You will see a movie, have some fun assignments, and have another speaker." The boy replied, "I like to see movies." A girl said, "I wonder if we'll see some of the babies." The bell rang and class was dismissed.

Day 2: 11:05-11:45

Today was a bit of a rushed session. The police officer and both the teacher and researcher were in the room when the subjects began to arrive. The weather was freezing rain, and everyone was excited because at the end of the last class Period , the principal announced that school would be dismissed at 11:40.

The teacher and researcher quickly passed out individual question cards and

Appendix B: Day 2 Continued

Question guides and instructed subjects to fill in the guides as the officer spoke. Two subjects who were absent yesterday were given pre-assessments and sent into The hallway to complete them. After they finished the pre-assessments, they were asked to write three questions on the question cards. One subject ,who is emotionally impaired, refused to write the questions even after being prompted by the teacher. These two subjects missed the first five minutes of the presentation.

The officer had brought crack cocaine in a sealed vial. It was an off-white color and looked a bit like soap. The subjects passed it around and looked at it as he began to talk. As they looked at it, several of them rolled up their noses and made faces. They looked at the vial turning it upside down and sideways. Commenting that it looked like soap, dirty rock candy, big pieces of salt and stones. Only one subject glanced at it and quickly passed it on.

As the officer spoke, only one subject took notes. All of the subjects watched him intently as he spoke and no one said a word. They all appeared to be engrossed. The subject who earlier refused to write up questions to ask the officer seemed to be one of the most interested. He sat forward on his seat watching the officer closely. (The officer did not know about the earlier refusal, and after the presentation, commented that the boy looked very interested.)

The officer had arrived at the school early and the researcher warned him that school would be dismissed early and he still wanted to speak to the group. Since the main focus of the total intervention was on the crack baby, it was decided that the officer would shorten up on the information he had on the history of cocaine.

Appendix B: Day 2 Continued

After a brief history, the officer explained that cocaine is a stimulant. He described in fairly deep detail how cocaine is used and what it looks like and talked about the strong psychological addiction of the drug and the potency of crack. He discussed how people will do extreme things to get the drug up to and including killing for the drug.

The next area he discussed was that of the effect the drug has on the user. eg. increased heart rate, stroke, increased temperature, paranoia, coma, death, and decreased sex drive. At this point, one boy turned around, looked at another boy and they began to laugh and one of the girls blushed but officer kept talking. He talked about the length of time that the person experienced the "high". Next, he talked about the fetus, describing how the drug crosses the placenta and stays in the baby's body longer than in the mother's and vasoconstriction was explained in detail. He told them that the baby gets everything the mother gets, only doubled. Several subjects winced as he bluntly told them that women often use crack to contract the uterus so that they can abort their unborn child. He described how the placenta disconnects from the uterus. At this point one of the girls covered her face with her hands. As he spoke, he described some of the other effects such as birth defects, strokes, death, and S.I.D.S. The entire time he spoke, he used examples from personal experience. He told them that he used to work undercover, and once a drug dealer told him that he "cut" his cocaine with rat poison when he was selling to people he "didn't like". He told the subjects about a child under a year old whose mother sold/smoked crack in the home where the baby

Appendix B: Day 2 Continued

was all day. Several subjects shook their heads as if disgusted. Another example he used was that of a baby born three and a half months early weighing two pounds. He described the machine and wires on the baby and three or four subject looked over toward the researcher who said, "You will see babies like this when we watch the movie I have for you."

During the presentation, the officer had addressed all of the questions on the question sheet. Most of the subject-generated questions were also answered and time was almost up. Several subjects asked questions: Is driving while high on crack like driving drunk? No, crack is a stimulant rather than a depressant. The high is short and most people smoke it at home. People are rarely pulled over under the influence of crack. Does crack help people with asthma? Cocaine used to be prescribed for people with asthma and crack probably would make breathing easier, but it would also irritate the lungs and bronchial tubes. What is a five ball? Five dollars worth of crack cocaine. Is it flammable? Yes, especially when freebasing. At this time, it can flare up in your face

Five minutes passed the dismissal time, subjects were released. After the subjects left the researcher asked the following questions which hadn't been answered:

1. Can a mother be convicted of murder? Yes, it has happened.
2. Does crack cause cancer? The crack would probably kill the user first.
3. What is the jail time for using crack? Usually there is no time for using it, but dealers can get up to 20 years or life without parole depending on the amount.

Appendix B: Day 3

Day 3: 11:05-12:10

After the question guides from the police speaker were handed in and yesterday's unanswered questions were explained, the researcher passed out the newsarticle "The Littlest Victims". The subjects immediately began to flip through the article and right away one of them said, "We read this in another class." The researcher replied, "Good, then it should be easier to read this time." "Maybe you will find out about some things that you missed the first time." One subject looked at the picture of the baby on the front and said, "Oh look at the tubes. Yuck!" Several other subjects began to verbalize the same thing. None of the subjects complained about reading it again and as the article was reviewed, four different subjects volunteered to read orally.

Several times as they read the researcher paused to ask questions. Birth defects caused by the drug were discussed. A subject asked if the mother could feel the baby kick or have a seizure prenatally. The effects of a lack of oxygen were discussed and one of the girls talked about a brother who was born blue because the cord was around the neck. Another subject asked if the baby knows that the mother did something wrong. Hypersensitivity and nervous system damage were briefly discussed then and discussion moved toward fetal development. The researcher asked subjects what they felt would happen if the mother took crack when the heart was developing. The subjects all agreed that it would malform or damage the heart. Other internal organs were discussed such as the liver, kidney, and brain. A subject asked if babies cry before they are born and discussion focused on how the

Appendix B: Day 3 Continued

baby feels. Will the unborn baby feel pain? Yes it may. Can it be awakened? Yes, possibly it could be. The next area discussed was the impact on the baby of the expectant mother's lack of prenatal care and nourishment . One subject simply stated that the baby could die. Another said that the baby would not develop properly. In relation to the environment after birth the researcher asked subjects what they think the crack-dependent mother's reaction will be to this crying baby. Four subjects yelled out at once: beat it, hurt it, abuse it, leave it. One suggested that the mother would take more crack and ignore the baby. Another said she might give it alcohol in its bottle to make it sleep. The class appeared to be appalled. They made comments like: "Oh, that's awful" and "Oh, gross". Another subject suggested that the mother may feed the baby crack. Toward the end of the discussion, one of the subjects told the group that his aunt in California has a foster home for "crack babies"and said he'd try to call or contact her for information. (He later said he hadn't talked to her in four years). The discussion then moved toward why the babies are in foster care. Reasons given by the researcher were related to abandonment in hospitals and other places. Subjects talked about abuse and neglect. All of the subjects were attentive during the entire discussion segment.

Each subjects wrote down five effects of prenatal exposure to crack cocaine. This took approximately five minutes and eighteen different effects were identified. The effects most often written down were related to heart disorders, brain damage, and prenatal addiction.

All of the subjects wrote down three questions to ask the R.N. speaker who

Appendix B: Day 3 Continued

was coming in. Once again several asked if their questions were okay. They were told that just about anything they wanted to know was a "good" question. They seemed enthusiastic and quickly finished.

Next, the newspaper article assignment was explained. Subjects watched with disinterest. One subject thought he had to go to the public library. The researcher explained verbally where in the school library to go to look for articles and asked subjects who to ask for help in the library. One of the subjects offered to help find articles for others using the computer. Another complained that he didn't want to do the assignment because there was no grade. The regular teacher had previously told the class that the material on crack wouldn't be graded. At this point, the researcher told the class that she'd talk to the regular teacher and that they would get something. Maybe they'd get extra credit or maybe some other reward. Subjects were also assured that the summary didn't have to be very long and that grammar, spelling, and punctuation were not the focus of the assignment. The focus was to find, read, and relate the information in an article on crack.

Day 4: 11:05-12:10

Completed assignments were collected. Only one subject had completed the newspaper/magazine article assignment on time. Her summary was two pages long, very informative, and was handed in with a photocopy of the article. Subjects were given permission to copy the articles for free in the special education office. The researcher explained that extra credit would be given for completed work. Subjects smiled and seemed pleased that they could start a new marking

Appendix B: Day 4 Continued

period with an "A" or "B" if they worked.

The nurse was ready to give her presentation. She had brought pictures of actual drugs and drug paraphernalia. As the subjects entered the room, they looked at the pictures and several made comments about the color of the crack. They thought it looked a little different that the crack that the police officer had brought. Some of the pictures showed the crack broken into long strips rather than random chunks. Pictures of alcohol and marijuana were included in the display.

As the R.N. spoke, the subjects intently listened. She asked them questions from time to time: "Does anyone know how crack is used?" Most of the questions were general, broad questions. She talked about what the drug looked like, how it was used, and the effect on the mother first. She explained that vasoconstriction places too much blood in the torso comparing it to an inner tube with too much air. Crack was defined as a stimulant, and she told them that the drug was very strong and the "high" was short. Polydrug use was discussed (this was the reason she had brought pictures of alcohol and marijuana) and she described how a crack user drinks alcohol or smokes marijuana to avoid the crash. One subject said that he hadn't known crack was a polydrug. The addictive nature of the drug was dealt with and the subjects asked her how hard it was to stop using and how often she sees crack users. She said she sees more users all of the time. She told them that all types of people use crack. John Belushi and Lynn Bias were identified as users and discussed.

Next, she began to relate the unborn baby's experience with the mother's drug use. She explained that the baby may not receive much oxygen for forty-five

Appendix B: Day 4 Continued

minutes after the mother's use. Cardiac effects of crack were discussed as were seizures, birth defect, low birth weight, brain lesions, strokes, learning problems, and other malformations. Subjects made faces and verbalized disgust (Yuck!,That's sick!,Who could do that to a baby!) as they listened and several of them were taking notes.

Lastly, she talked about the family system and dysfunction of the home. Money problems as well as personal relationships were discussed. She asked the subjects how they think a crack user acts when they "need" the drug. They replied, "angry, crabby, and irrational". She explained that "crack babies" are often abused or even left in the hospital, on the street, or sold and one subject suggested jailing both parents. After a five-minute discussion period in which the subjects mostly asked questions related to addiction, they all took another look at the pictures. They helped her pack up her displays, and she gave them each a brochure on general drug abuse. All of the subjects flipped through the brochures talking among themselves.

After the nurse had finished, subjects were allowed to gather into teams for the brochure question contest. At this point the researcher believed that self-selected groups would put forth more effort than assigned groups. As a whole, the group appeared interested in the topic but not very motivated. When the group had settled into smaller groups, they chose their question card from the hat and marked their handout according to which question they had chosen. Absent subjects were placed

Appendix B: Day 4 Continued

into groups by their peers. Together as a class, the demonstration question was completed. The subjects read the question and answer and then a list of facts relating to the question was written on the chalkboard. Three of the subjects did not seem to understand the assignment until three or four facts were written down. They were told that they could add facts from their heads if they wanted to increase their lists.

Next, the word search was passed out. One subject complained that he hated word searches. He was told that he could work with someone else. The researcher started to read the words to them, and a subject asked if they could just work on it. The researcher told the subject that she wanted to be certain that they knew what the words were and asked a subject to read the words as the others pointed to them and then they were allowed to work. All of the subjects eagerly worked on the puzzle.

Day 5: 11:05-12:10

The subjects handed in completed assignments as they came to class. The researcher announced that it was time to have the brochure question contest and subjects moved into team groups. One group complained that they " hadn't even read" their question. Another group had read it but not made a list. The third group had a short list of facts made. Several subjects began to ask for more time. The researcher denied extra time and listed the groups on the board. Each group began to write its list on the board. All of the groups reread their question and answered as they worked. They were very loud and competitive as each team orally read the

Appendix B: Day 5 Continued

other teams' lists and questions. In the end, the winning group , which was the group that had arrived with a list started, had a total of 17 items. Second place was the group who arrived having read the question, but who had not listed anything. They had listed thirteen things. The team in last place which arrived totally unprepared had listed eight facts. The winning team members collected a pack of gum each. The last place team complained that it wasn't fair, and the others told them they should have come prepared.

The subjects settled in for the video, Cocaine's Children. A brief description of what they were about to see was given by the researcher. The subjects were ask to watch the behavior of the babies and to listen to what the doctor had to say. Subjects asked if they would see babies crying, babies with tubes, and addicted babies.

As the video played, subjects watched, often making faces or covering their eyes making comments to themselves. Afterwards, several sat shaking their heads. One of the boys said that no one has the right to do that to a baby and they all began to talk at once about the babies' condition. They were commenting on the wires and machines as well as the crying and size of the babies. The researcher asked for them to speak one at a time. They talked about how big the diapers were on the babies and how they thought the babies looked small. One subject asked why the babies were all dark-skinned. Another asked how long the babies were in the hospital. They were concerned that some of the babies would die. The tubes

Appendix B: Day 5 Continued

seemed to bother the subjects quite a bit and one subject explained that the tubes were for draining fluids and helping the baby breathe.

The researcher asked the subjects how they would feel if one of those babies was a relative or their own baby. The subjects rolled their eyes up, looked shocked and several of them sat back in their seats and sighed. One boy said, "I'd shoot myself." Another said if it was his sister's baby, he'd kill her as he felt that she had no right to expose her baby to drugs. Discussion moved toward the older child featured in the video. None of the subjects felt that he would ever be 100% "normal".

Next, the researcher wrote down on chart paper hanging on the wall a list of things they had seen on the video. The subjects each quickly named something they'd seen. Eleven characteristics of "crack babies" were identified and discussed. (All of them had been discussed earlier.)

Now the researcher told the subjects that their assignment was to pretend that they are a two-week-old baby who had been exposed to crack (several subjects giggled) and write a letter to their mother. They became noisy saying things like: Wow, Mom, you blew it.; Hey, stupid.; and so on. One subject asked if they could swear. "No" was the answer, of course. Several subjects immediately got out paper and began to write. They were instructed to think about how the baby feels, how long it will be in the hospital, and what the immediate future looks like. The bell rang, and class was dismissed.

Appendix B: Day 6

Day 6: 11:05-12:10

Today as the subjects arrived they handed in their homework and other papers. Several of them were talking about the article summaries they had done. One subject believed that he had completed it incorrectly because it was short, and another asked if hers was too long.

Before beginning the family script, the researcher asked several review questions about crack cocaine. What is it? How does it differ from cocaine? The subjects knew the difference, but one subject said that it produced hallucinations and it does not. The physical effects on the crack user were reviewed. The subjects did remember that it stays in the baby's body longer than the mother's body. Addiction and the "crash" or after effects were discussed. Subjects volunteered correct information on the physical effects. One subject asked what the difference between miscarriage and stillborn was and birth defects were discussed.

The researcher told the subjects that they would be role playing the family of a crack-cocaine-exposed infant. The subjects volunteered to play the roles. As they volunteered, the researcher described the parts of the family. They would play out a day in the life of the infant. Several subjects remembered doing this in relationship to the alcoholic family and they sat up and appeared to be excited about role playing again.

The dependent mother was described by subjects as angry, doesn't care about baby and family, wants more drug, selfish, doesn't eat, may not respond to the baby and may beat or abandon the baby.

Appendix B: Day 6 Continued

Subjects described the co-dependent father as being the person who gave the crack to the mother the first time and now doesn't use it anymore. They said he may leave or start using again. He may take over her role as caregiver of the children feeling guilty and will try very hard to be patient with the baby. He may be dumped on and have to miss work or be late.

Next, the subjects described the mascot as the kid who jokes, gets into trouble in school, and has and creates more problems. This person doesn't help the situation or help with the baby. They needed prompting to describe the mascot.

The hero child was described by a subjects as "super sister", the one who cooks, cleans and covers up for the family. Subjects knew that the hero was the one who did well in school and so on. This child will take care of the baby and other children.

The role play began with all of the family members getting ready to start their week on a Monday morning and the doll cried almost constantly. The father had to phone in late for work. The hero helped to make breakfast as mom complained about the baby. Everyone except the mascot held the baby had tried to feed it. It cried continuously and the researcher suggested that maybe the infant had sucking/feeding problems. The mother walked out leaving Dad with the baby. The dad called into work, and his boss (researcher) said to hurry up that it was the third call in a week. The dad tried to explain and in the meantime the mascot spilled her milk. The hero tried to clean it up and Dad yelled. The baby still cried and was left sitting on a tabletop. Mom came back in and hollered at the kids to go to school.

Appendix B: Day 6 Continued

Dad went to work and mom was alone with the crying baby. She left and went up to a person in the audience, called the person an aunt and left the baby to go get crack. She approached another subject called him her brother and asked to borrow money then went to another and made her purchase, pretending to smoke the "crack". (All of this was done without prompting from the researcher.) In the meantime, the researcher asked the "aunt" if the mother brought a diaper bag or fresh bottles for the baby. The aunt said the baby shouldn't be with the mother. It should be taken away.

The mascot and hero came home from school. Today the mascot received a detention slip. Dad signed the slip and the hero started to make dinner. Mom came in without the baby who was still crying at the aunt's. Mom found out about the detention slip and began to scream at the mascot sending her to her room. The mom and dad began to fight about the kids and dad sent Mom back out to get the baby. Mom got into an argument with the aunt and took the baby home. Several times the mom said she wanted more crack. She demanded money from Dad to buy more crack then went to the dealer and demanded crack. Dad stood looking at the crying baby. The Hero had dinner ready and they ate. Afterwards, the kids went to bed, mom came back again and she and dad fought again. He brought up her drug problem and she again left.

During the discussion following the role play, all of the subjects contributed. They seemed to agree that the mom might care about the baby, but as one subject stated, "The crack is more important than the baby." The researcher tried to focus

Appendix B: Day 6 Continued

the discussion on the baby as they reviewed how the baby was treated. The types of problems the baby had were addressed: feeding, crying, small, neglected, hypersensitivity, and possible abuse. In the future, the subjects felt this baby may be beaten, die, go to foster care, and have learning problems.

The researcher pointed out that some babies are born with no apparent problems, some are like the baby in the role play, and some are withdrawn and quiet. One of the subjects asked why the hospital would parents to take a baby home who had problems or whose parents were using. The researcher explained about insurances paying only for very necessary care and a shortage of foster homes. Several subjects began to discuss orphanages and foster care and the lack of both.

The researcher asked them to think five years down the road for the baby. What would life be like? The group was split down the middle into two groups. Each group was given chart paper, a marker, and a ten-minute time limit. Group 1 listed 30 things and group 2 listed 19. Everyone participated. As they worked they asked for terms to be defined such as antisocial. They asked for words to be spelled and asked for terms to fit descriptions of behavior such as hypersensitive. They read each others lists as they worked, then quickly each group read their list aloud.

Next, the researcher assigned them to assume the identity of the baby at five years old, and again write a letter to their mother. They all began to talk at once about being in school and fighting or being withdrawn. The bell rang as they talked

Appendix B: Day 7 Continued

and class was dismissed. There was not enough time to share completed work assignments today.

Day 7: 11:05-12:10

Today, the subjects came into the room and began to hand in completed work. Several had to be reminded to put their names on their papers. They had been told on day 5 and day 6 that today was the deadline for work but those who wanted to share with the group kept their papers and read them to the group.

After the attendance was taken, two of the subjects read their letters to the mother from a five year old, one read his letter from a two week old and two gave verbal summaries of their articles. The rest of the group was very receptive. They all seemed to think that the letters to the mothers" told it like it was". Comments were made like "Gee, that mother has no right, " and "people should be punished for doing that to a baby". Abuse seemed to be a common theme in the article summaries and subjects asked questions about the articles. They wanted to know where the articles came from and they asked to see pictures. Several made comments on their own articles or letters either comparing or saying "Oh, I forgot that." This segment of the class period was kept short because the researcher wanted to leave sufficient time for subjects to complete the post-assessment.

Before the post-assessments were passed out, the researcher told subjects to take their time and read each question carefully and then reread the entire test before handing it in. Again the five optional questions at the end of the test were explained as confidential and optional and subjects were told to ask if the needed anything

Appendix B: Day 7 Continued

read to them or had any questions.

The assessments were passed out and the subjects worked quietly. The researcher answered several questions that individual subjects had such as "What is this word?" and so on. During the test time, the researcher approached one of the subjects and asked if the subject needed anything read and the subject said he didn't need any help. All of the assessments were handed in within 30 minutes from the starting time.

The assessments had been corrected and were passed back. Subjects asked individual questions. One subject felt that "crack babies" may continue to have problems eating later in school (item 5) and several others agreed. Three or four subjects had incorrectly answered question five because they knew the baby had feeding problems. One subject pointed out that if the baby were severely mentally impaired then a feeding problem could still be present. Following this discussion , class was dismissed.