

CHILDREN EXPOSED TO CRYSTAL METH: BUILDING RESILIENCE

by Dana H. Davidson*

INTRODUCTION

Crystal meth- amphetamine (also known as *Crystal Meth, Ice, Meth, Crank, or Yaba*) is an illegal, relatively inexpensive drug that challenges concepts of the nature and nurture of children, family dynamics, self concept, peer interactions, emotional and moral development are all jeopardized by the presence of “ice” in the life of a child. This paper proposes that the use of systems theory helps develop a comprehensive view of complex environmental dangers caused by use of a powerful drug such as crystal methamphetamine.

By using systems theory to map the complex inter-relationships caused by drug use as it affects adults and children, one can then turn to program models that help build *resilience* to discover means to help children out of the problematic social and cognitive behaviors that result from exposure. *Resilience* is proposed as a state of being in which persons, including even very young children, can develop the ability to seek safety, cope with challenges, remain flexible in the face of challenging circumstances, make positive changes, learn to pay attention, handle frustration and ask for help from others in order to develop in a healthy manner in spite of difficult circumstances. The outcome of resilience is the empowerment of children with their own inner strengths to face challenges related to drug use.

Unlike any other, “ice” is a synthetic drug that alters the chemistry and functioning of the human brain. It offers the longest high of any drug. Table 1. (Davidson, 2005) provides a comparison of four popular drugs, to illustrate the fact that any drug may be harmful, but the effects of crystal methamphetamine are more severe and last much longer than organic drugs.

Findings on prenatal and long-term effects on children are preliminary, yet most agree that resultant biological and emotional stressors on children before and after birth are potentially damaging. Ninety per cent of child abuse cases in Hawaii are related to family use of crystal “meth“. It is estimated that 600-800 infants per year are born in Hawaii having been exposed to “ice” before birth.

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Table 1. A Comparison of Four Popular Drugs

<u>ALCOHOL</u>	<u>MARIJUANA</u>	<u>ECSTASY</u>	<u>ICE</u>
Organic	organic	Non-organic	Non-organic
Bypasses digestion, Goes to Bloodstream	Goes to lungs	Effects brain cells and depletes serotonin	Changes brain cells and increases dopamine
Impairs reason Depression, Anxiety	Stunts Intellectual functioning	Confusion, depression, anxiety	Paranoia Psychosis Violent mood swings
Social disintegration	Lower social skills	Affects work +relationship	Affects all domains

Professionals and parents wonder what can be done to help children coming from ice-using families. To build resilience and increase protective factors for children, Hawaii has begun several programs to inform families, and to intervene through educational programs that encourage positive social-emotional, sensory integration and linguistic behaviors with children that have been exposed to crystal meth. A system of care is being developed from the youngest ages up.

A SYSTEMS VIEW OF SUBSTANCE ABUSE IN THE LIFE OF CHILDREN

A system is an interconnected group, stemming from the Greek word “systema,” meaning to place together. Systems theory, drawn from Bronfenbrenner’s ecological theory, helps create a focal point and an objective map of complex family dynamics that are often especially difficult to understand when there is substance abuse. The first level, at the focal (“micro”) point can be as small as single neuron affected by crystal met amphetamine or it can be a child or a family. Once the focal point is identified, relationships with other levels can be identified; for example, if a young child is the focal point, then families and care-providers will be the meso- level, while communities and service agencies can be seen as the exo-level and our cultures would often be the macro- level. Each level interacts with all the other levels and each system acts with other systems. (Bronfenbrenner, 1979).

Since Crystal Metamphetamine is a drug that affects every social-economic group, every generation, community (*Moku*) and profession, then the

use of systems theory is a common-sense application for identifying relationships. Once the “map” is identified, then other decision-making factors come into play. In Hawaii, the increasing use of crystal meth is seen as a challenge and offers a focal point of its own, for it has presented such a serious challenge that it has brought communities together. No single systemic component can fully address and solve the problems related to the use of “ice”. The system of family dynamics is a starting point for addressing the effects of crystal meth within the family, and for understanding many of the resultant interactions of each family with its own community.

In Hawaii, “Ice” is viewed as an inter-generational drug, whereby grandparents and parents often use it and share it with their grandchildren. Yet the most frequent identified users are between 18-35 years of age which is the peak age for bearing and parenting young children (Stark, 2005). Because early childhood programs work with many families and young children, The Center for the Study of Social Policy identified the use of early childhood programs as a good community outreach point for work with families’ risk and protective factors; the Center’s work on building program capacity is based on a national study of programs’ success in this arena. (Center for the Study of Social Policy, 2005).

PSYCHOLOGICAL VULNERABILITIES CAUSED BY EXPOSURE TO CRYSTAL METH

Different drugs act differently on neuronal receptors. Crystal methamphetamine acts in a matter of seconds by entering the bloodstream and affecting the reward pathway of the brain. The brain’s neuro-receptors respond with an overproduction of dopamine and serotonin. The resultant “high” feeling lasts longer than with other drugs, and no “high” will ever feel as good as the first one; the reward pathway is more stimulated than ever. When the drug is withdrawn, the receptor adaptation process continues, e.g. the cells continue to make too much dopamine, causing long lasting changes in cell function and eventual cell death. The cells cannot reabsorb all the extra dopamine and so the chemical exaggerates the normal actions of the neurotransmitter, and soon it takes longer to feel pleasure than it did before use. Indeed, the highest high caused by any drug results in the lowest low.

Findings are still preliminary with mixed results regarding the permanency of effects related to young children. Pediatricians and health care providers are cautious when working with mothers that may be using drugs because of their need to develop trust and continue medical care, especially before birth. Almost all parents that abuse “Ice” are poly-substance users, with alcohol, nicotine and marijuana use reported at higher rates than crystal meth. (DeRauf, 2005). The effects of nicotine and alcohol are well-known known, unlike controversial findings related to stimulant drugs.

Ice itself is mixed with other drugs such as heroin, marijuana and ecstasy. In the making of Ice, lead, battery acid, rat feces, antifreeze and other

substances that have not fully been studied nor reported are usually mixed into the solution. Human urine is reprocessed and dirt in meth labs is mined and the powerful drug can be harvested and reused. In fact, more is *not* known than is known about the toxic effects of this drug on humans and the environment

The nature and nurture of children, family dynamics, self concept, peer interactions, emotional and moral development are all jeopardized by the presence of “ice” in the life of a child. Researchers and care providers agree that the presence of crystal meth causes powerful stressors in the emotional life of children. Stress has its own, well-studied effects on development.(Beers, 2002).

Children growing up in homes where parents are using drugs may be exposed to crimes and never have a chance to develop their own moral centers. Attachment and bonding are disrupted, if in fact they are even formed. The emotional environment for children is continuously compromised with chaos, abuse and neglect of concern before or after birth. Children often become the parents in households where substances are abused. Most foster parent children in the Hawaii State Department of Human Services programs are taken from families that use crystal methamphetamine.

Table 2. shows the cycle of behavior related to the use of crystal meth. Imagine these behaviors as seen through the eyes of a young child:

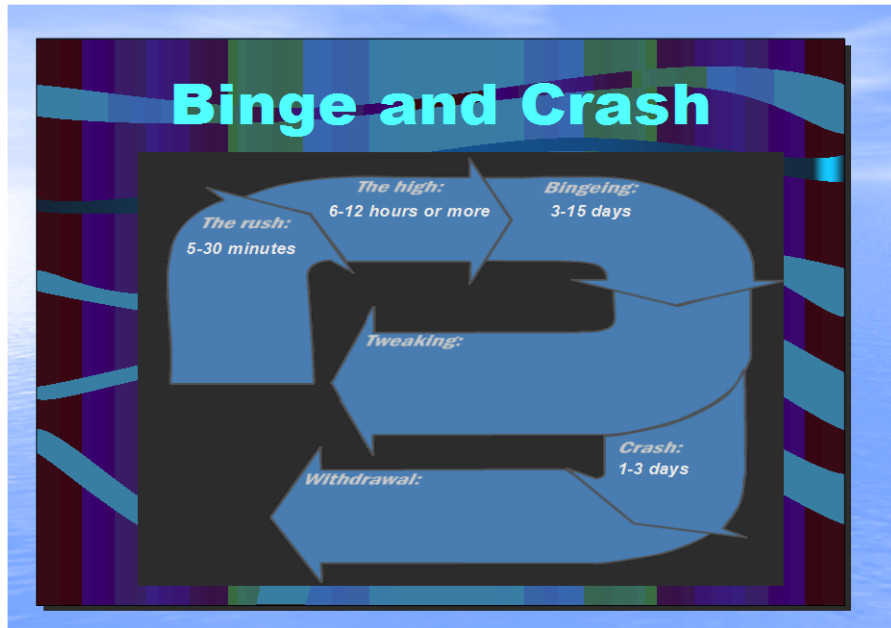


Table 2. (NIDA)

CRYSTAL METH: THE CYCLE OF USE

In a matter of seconds, the rush and subsequent high cause manic, unpredictable behavior where anger flashes, the user may repeat behaviors endlessly and parents' own pleasure screens out the ability to meet the needs of children. To remain high, users make keep taking more crystal meth for two weeks or even longer, and with prolonged intense use sometimes frightening paranoid schizophrenic behaviors known as "tweaking" occur. The "crash" lasts for days, may be similar to a coma, and people often die by heart failure or strokes during this phase. Withdrawal is seemingly not as difficult as other drugs, however, cell memory has been affected and the user remembers and craves the high. Recidivism rates are very high before rehabilitation occurs.

Because of the alterations in parental behavior, children may exhibit school truancy, irregular attendance, and disappearance or drop-outs occur; all these behaviors are more frequent when families abuse drugs. Children are embarrassed to bring their friends home because of the mess and even destruction found in homes where parents use crystal meth. Injuries and illness such as gun shots and dog bites, hepatitis, HIV/AIDS, lead poisoning, skin infections, respiratory illnesses and malnutrition are common in houses where meth is manufactured; explosions, fires and death may occur. Neglect and abuse of every form occur.

CHARACTERISTICS OF SUCCESSFUL PROGRAMS FOR BUILDING RESILIENCE

Early prevention and intervention are the most effective way to work with children and families. A recent study of effective programs by The Kamehameha Schools (Davidson, 2001) found several characteristics in common across the programs that seem to be most effective. Characteristics include building relationships and trust with families; partnerships with existing programs; clearly defined programs; a common focus on raising children for success, safety and health; strong partnerships with parents based on culture and ethnic identity, and programs based on models of family life education.

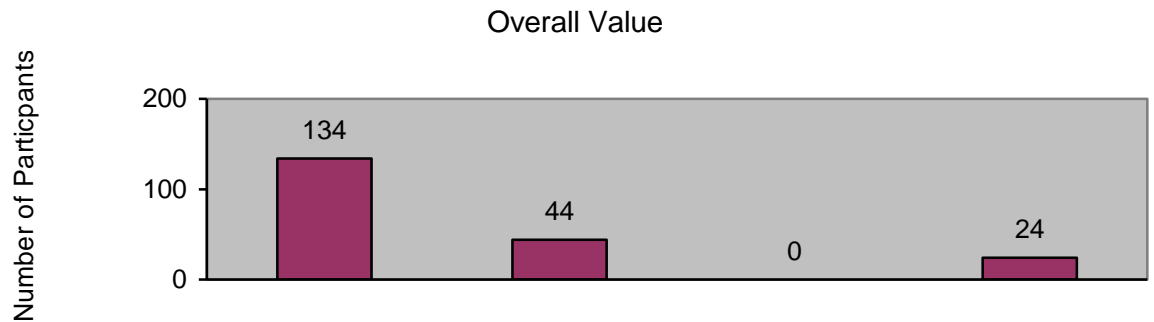
In addition to programs at the hands-on level, policy centers are becoming more involved in resilience research and education. The Center for the Study of Social Policy has developed a resource guide (2005) for early education programs. Excellent centers for research on resilience can be found at universities, such as at the University of Maryland, the University of Minnesota and the University of Manoa Center on the Family. Culturally based programs offer models such as training offered by The Inter-Tribal Council of the Great Lakes. Some states, such as California and Washington, are developing family strengthening programs designed for families affected by exposure to crystal methamphetamine and cocaine. (Davidson, 2001). In Hawaii last year, a Head Start Collaborative Grant (Rose, 2004) was funded for the years 2004-2005 to develop three products:

FORUM ON PUBLIC POLICY

1. A visual presentation was developed with contents similar to one being presented at the Oxford Round Table. The presentation was based on the premise that building resilience begins with knowledge. Knowledge demystifies myths, lays a foundation for understanding, and can even equip us with the tools to keep our children safe, healthy and ready to learn.

2. A Statewide *Solutions to Ice* Symposium was held on May 4th, and was presented to share that knowledge. Over 246 professionals and family members attended from all the neighbor isles of Hawaii, and we had guests from Seattle, Washington, and Washington, DC. Table 3 shows that Evaluations were positive:

Table 3. Overall Symposium Feedback:



COMMENTS

- ❖ Very informative and thought provoking. Educational, effective and hopeful. Thankfully Ice is finally being addressed. Excellent. This symposium was very effective in encouraging educators to keep doing what we are doing to make a difference.

3. Adaptation of *Second Step: A Violence Prevention Curriculum* (For preschool/kindergarten through grade 9). The nationally-known *Second Step* Curriculum (Committee for Children, 2004), was purchased by Hawaii's Head Start, and a two day training was offered for early childhood educators. The *Second Step* program teaches social and emotional skills for violence prevention and includes research-based, teacher-friendly curricula, training for educators, and parent-education components. Their curriculum addresses the development of social-emotional intelligence and language skills in young children and their families. It is seen as an excellent model for all children, so that we may avoid labeling or stereotypes of families that may be abusing substances such as crystal met amphetamine. Second

Step also offers strengths building in areas such as stress reduction and handling transitions that may be particular problems for children that have been exposed to behaviors related to parental use of crystal meth.

SPECIFIC STRATEGIES RECOMMENDED TO HELP BUILD RESILIENCE

Even with our focus on strengths and capacity building, there are some disturbing findings related to exposure to crystal meth that suggest that the human brain may be altered in long-lasting ways. Regardless of the permanency of effects, it matters much to children that addicts around them may crave, seek and use drugs even when their children's very lives are at stake. Luthar and others suggest that even young children may learn strategies that develop inner strengths (Luthar, 2003). More research is needed on the specific characteristics of programs that have had success in supporting children and families that have felt the effects of drug abuse. Research-based points on success:

- Work with spiritual leaders, churches, temples, groups
- Parent-child monitoring is offered with clear rules of conduct.
- Promote drug-free lifestyles, with support to achieve and enjoy success.
- Share the belief that parents, the educational program and the community all share disapproval of drug use.
- Culturally sensitive support is offered to build a strong ethnic identity. When considering all these factors, contingency management interventions that are cultural have the greatest empirical support for promoting therapeutic changes in families with substance abuse (*Na mele, lomi lomi, ohana, ho'o pono pono*)
- Use the great outdoors of any environment
- Build positive relationships
- Use preventative practices
- Teach social skills
- Individualize behavior intervention efforts
- Teach children replacement skills
- Help with underlying causes of depression, hopelessness by offering things to anticipate, prepare, enjoy together
- Provide specialized services
- Focus on sensory integration and attending behaviors

CONCLUSIONS

We hope that the material presented here has broadened your understanding of crystal meth-its short term and long term effects and its impact upon all layers of society. Children are more resilient than adults by nature, yet they are also the most profoundly affected by the presence of powerful stressors.

Use of a systems view helps to unravel complex family dynamics and the

related effects of drug use on *each* child ; then, it is possible to develop a better long term plan for a system of care. Combined with compassion and understanding, professionals may hone their skills for work with children and families impacted by the use of crystal methamphetamine and other drugs. No one professional nor program, no matter how committed we are, can offer sufficient long- lasting support to help face the lifelong challenges experienced by the children in our care. It will take all of us as parents, community members, professionals and individuals to knowledgeably work together to keep our children, our families, our community - our common ground- safe and healthy in spite of the presence of crystal methamphetamine.

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