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Intervention for Behavioral-Emotional Problems of Children and Adolescents: School-Based Prevention

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Many childhood and adolescent behavioral and emotional disorders have developmental precursors and manifest a continuum of symptoms along different pathways. The multifinality of childhood disorders indicates that early intervention is particularly more important in curtailing the onset of various symptoms for children who are at risk. Given the characteristics of childhood behavioral and emotional disorder and considering the context of the Korean children and adolescent mental health needs, this study reviewed empirically proven school-based prevention programs for childhood emotional and behavioral problems in the US. Characteristics of effective school based programs on the primary, secondary, and tertiary level were identified. Direct teaching of problem-solving skills and content specific knowledge using concrete and interactive behavioral methods were common across all levels of intervention. Individual treatment and multisystemic components including parents, teachers and peers were added with increase in the severity of problems. Specificity of the targeted behavior, developmentally appropriate timing of the intervention, as well as duration of treatment and extent of follow up were important ingredients of effective prevention program. It was concluded that a better use of the existing school-based mental health resources can be achieved through universal, primary prevention programs school-wide and secondary prevention programs targeted at children at risk. Future inquiry should evaluate ways to modify these proven programs to improve the current state of the school based mental health services for Korean children and adolescents with behavior and emotional problems.

Key words : behavioral-emotional disorder, childhood-adolescence developmental psychopathology, preventive intervention, school-based intervention

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Prevention of childhood and adolescent behavioral-emotional problems before their onset is of critical importance. First of all, the prevalence rate of childhood behavioral problems is relatively high with many children and adolescents exhibiting some form of problematic behavior. The figure increases when considering the significant number that goes undetected or under-reported. The developmental trajectory of many behavioral disorders points to the existence of several precursors in the early childhood behavioral patterns (O'Shaughnessy & Lane, 2002). As is true for many disorders, the more serious the symptoms at its onset, the more chronic the problem is, lending further support for early intervention. On the other hand, only a few children who are well adjusted in the early years grow up to exhibiting serious behavioral problems during their later years. These findings indicate that ensuring a healthy emotional and social adjustment during childhood and adolescence requires identifying and addressing risk factors while enhancing protective factors, thereby, building resilience to various stressors.

The need for early intervention of mental health problems for Korean children and adolescents is even more critical given the unique educational and mental health systems context in Korea. While heavy emphasis on achievement and competition has inevitably exposed youngsters to a high level of academic and social pressure, their emotional needs have taken a back seat. They are addressed only when problems interfere with optimal academic functioning or become externalized, raising disciplinary concerns. In addition, there is a general lack of a systematic community mental health network in Korea. Hence schools are forced to address these needs in the face of a rising prevalence rate of many types of childhood and adolescent behavioral problems. Schools are faced with not only the learning and achievement related problems such as academic underachievement, ADHD, learning disabilities (LD) or disruptive behaviors in the classrooms but also with conduct problems such as bullying, truancy, substance abuse, drop-out and other more aggressive and seriously delinquent behaviors. Due to the high level of co-morbidity between and among the externalizing and internalizing behaviors, schools are also forced to address more internalizing problems such as anxiety, depression and even suicide. While they are more difficult to detect, these problems impact on the child's optimal functioning at school just as much. Adding to this burden is an alarming increase in the rate of divorce and the incidents of domestic violence and child abuse. These serious societal and environmental risk factors potentially compromise childhood adjustment with multiple negative implications. School's ability to cope with these problems notwithstanding, the fact that children spend most of their waking hours in school makes school an ideal place to intervene on their

mental health concerns.

Consequently, some efforts have been made to address the growing mental health concerns for children and adolescents in Korea. The assignment of certified school counselors to local schools is one such example. However, the current state of services delivered as school-based intervention programs for behavioral-emotional problems, is far less than desirable. Not only is there a shortage of professionally trained counselors per number of students in need, those few who function as counselors most often spend their time providing direct services. They provide short-term individual counseling or crisis intervention with students or parents who are, in most incidences, called upon to address their child's inappropriate conduct. Since many of them are also subject or homeroom teachers, they generally resort to using more solution-focused and problem-solving approaches to address these problems given their limited time (대구광역시 서구 보건소, 2002; 민성길 외, 1977; 신현숙 외, 2004; Telephone interviews with school counselors). There are not any psychologists who can oversee the mental health issues in the Korean school setting as there are in the US. Along with the general lack of social welfare and community mental health delivery system, these factors contribute to the school counselors inadvertently acting as catch-all gate keepers for mental health concerns in the school. They encounter serious and chronic emotional problems, which require more expertise in identification, diagnosis and treatment than they are trained for. For they often have received their counseling certification through the professional development program. These difficulties embedded in the service delivery system in the schools is reflected in an underutilization of the services (telephone interviews with school counselors). Additionally, those who provide counseling report a disproportionately heavier reliance on the use of anonymous cyber counseling. The time restraint, the large counselor to student ratio, the ease of the internet access, the cultural bias against seeking psychological help, the issue of confidentiality and peer pressure contributed to the reliance on cyber counseling. Given these factors, this paper argues that a move toward prevention will improve the current state of school-based mental health services for child and adolescent with emotional and behavioral problems.

Many childhood and adolescent behavioral and emotional disorders have developmental precursors and manifest a continuum of symptoms along the developmental pathways. Considering the multifinality of childhood disorders, early intervention is particularly more important in curtailing the onset of various symptoms for children who are at risk. On a more practical side, making better use of the existing mental health resources can be achieved through the psycho-educational approach generally used in the universal or primary prevention programs

rather than addressing problems after they manifest themselves. Similarly, more large scale group approach should be a preferred modality of intervention over individual treatment. Since primary interventions are directed at all students, the effect of social labeling can be minimized. Some of the primary and many of the secondary prevention efforts require parent or family participation. Therefore, these preventive efforts extend the curative effect to broader family context of the child, whose symptoms, at least in part, inevitably reflect the dysfunctionality in the familial context.

In the remainder of this paper, an introduction to the type and range of school-based preventive programs will be presented. A description of intervention programs and a discussion of the application of these programs in the Korean context with recommendations for further inquiry and research will follow.

Overview

A Continuum of Treatment: Primary/ Universal, Secondary & Tertiary Intervention

According to the Caplan's original three-prong model, intervention can be categorized into primary, secondary, or tertiary intervention (Caplan, 1964). Primary intervention attempts to target the disorder before it manifests itself. It involves both general health enhancement and prevention of specific dysfunction. Secondary intervention is usually an effort to shorten the duration of existing cases through early referral, diagnosis, and treatment. It can be viewed as a combination of prevention and treatment in low doses. Tertiary intervention reduces residual problems of disorders. Typically, it means treatment of known disorders through individual treatment or remediation. Tertiary intervention takes place only after the disorder has manifested itself (Wicks-Nelson & Israel, 2003). It helps the child cope with the disorder to function more adequately.

The more recent conceptualization views primary intervention as prevention that occurs before the full onset of disorders or problems. In this sense, primary, universal preventive interventions target entire populations for which greater than average risk has not been identified. Interventions are acceptable to the populations, and the risk of adverse outcome from the interventions is low. An example is teaching all children in a school the harmful effects of bullying, school violence or substance abuse to reduce the incidence rate of these behaviors.

Because of its focus on risk reduction, universal or primary prevention is helpful in reducing risk in multiple problem areas. This is an important benefit since many of poor outcomes such as psychopathology, school failure, delinquency and substance abuse have overlapping associated risk factors and a significant degree of comorbidity (Greenberg,

Domitrovich & Bumbarger, 2000; Greenberg, Weissberg, O'Brien, Resnik & Elias, 2003). Similarly, its emphasis on promoting good psychological health will enhance resilience, whose effects will carry across different domains. Numerous findings do indicate that childhood adjustment is highly correlated with adjustment during later years. For example, Dulak (1995) pointed out that only 8% of well-adjusted children go on to have serious adjustment problems whereas 30% of the clinically dysfunctional children exhibited maladjustment as adults.

Dealing with a very low level psychopathology at the universal, primary prevention level also adds a practical dimension to the current counseling delivery system in the Korean school context. The universal or primary intervention are generally group interventions that can be carried out by para-professionals under supervision. This is especially pertinent in the Korean context with its shortage of professional mental health providers. Promoting good mental health through the use of psycho-education at the primary prevention level utilizing more group-based approach rather than addressing problems after their onset is also more efficient use of their time. One of the main advantages of the universal or primary intervention is the reduced risk of the effects of labeling because the treatment is targeted at all students. This is an important benefit for Korean children and adolescent who seek anonymous counseling.

Secondary prevention, also considered the at-risk intervention, targets individuals who are at a higher than average risk for disorder. Thus intervention might be directed toward individuals with an identified biological risk, high stress, family dysfunction, or poverty. One such example is the Head Start Program. It is one of the best known early school readiness programs for children from low income families with high risk for school failure. At this level of intervention, prevention is combined with treatment. Generally secondary interventions address specific skills deficit in children who exhibit precursors or low level symptoms of a particular disorder. Transfer of the skills learned during training to other context is an integral part of the prevention-treatment approach in the secondary prevention programs. Depending on the type of behavioral problems targeted, secondary intervention often require parental involvement to be truly effective.

Tertiary prevention is targeted to those high-risk individuals who show signs forecasting a disorder, or who have biological markers that predispose a disorder, but currently do not meet the specific criteria for a formal diagnosis. Preventive efforts on the tertiary level are targeting those children whose problems are not severe enough to get formal diagnosis. They do not warrant special education services but their behaviors are problematic enough to create serious disruption in the classroom or pose safety concerns for others or themselves. Providing

social skills training to a group of adolescents, who are already manifesting many anti-social and oppositional-defiant behaviors, but do not yet formally meet the criteria for oppositional defiant disorder (ODD) or conduct disorder (CD) would be an example. Those children and adolescents who have more internalizing problems such as anxiety, depression or suicidal risk are also targeted. Because of the nature of the internalizing symptoms, which do not allow for easy detection, these internalizing disorders targeted at the tertiary level may be more chronic and severe, thus resistant to treatment. By intervening before the full blown symptoms emerge, tertiary preventive interventions not only address the identified symptoms but also equip the children with better coping skills. They help the child to deal with the everyday challenge of schooling and childhood, thereby, ensuring their overall adjustment despite their difficulties.

Understanding Protective and Risk Factors for Childhood Behavior-Emotional Disorders: Point of Entry: Where to intervene?

A review of known protective and risk factors of childhood behavioral disorder indicates a striking consistency of findings. The findings suggest common developmental pathways toward diverse patterns of adjustment and maladaptation. Conversely, they point to common factors by which these pathways maybe diverted. Resilience to adversity depends on the characteristics of the developmental context and the child's characteristics themselves (Loeber, Farrington, Stouthamer-Loeber, & Van Kammen, 1998).

Most school-based intervention programs target promoting such child characteristics as good intellectual ability, language competence, positive temperament or easy going disposition; positive social orientation including close peer relations, high level of self-efficacy, self-confidence and self-esteem; achievement orientation with high expectations, resilient belief system, faith and higher rate of engagement in productive activities. (Doll & Lyon, 1998). Psychological and social competence can be specified as distinct dimensions of positive mental health (Lane, Gresham & O' Shaughnessy, 2002). Social competence refers to the degree to which children demonstrate the capacities required for effective interpersonal functioning. Psychological competence or well-being refers to the extent to which the internal and, hence, more subjective experience that children have of themselves and that lives are favorable and thus likely to facilitate their overall adaptation. Psychological and social competence is further specified in terms of cognitive, behavioral, emotional and motivational dimensions. The cognitive dimension refers to the fund of information, decision-making skills, attributional style, accurate self-perception and self understanding. The behavioral component of the psychological and social competence includes assertiveness,

problem-solving, conversational skills, pro-social "helping" behavior and supportive relationship with significant others such as parents, peers and teachers. The emotional dimension refers to the ability for affect regulation, affective relationship formation as well as feelings of self-worth and subjective well-being. The motivational dimension refers to the value/moral development, sense of personal efficacy and control, self-esteem and goals and standards.

On the other hand, strong social support and well developed coping skills may reduce the likelihood of a range of disorders even in the presence of variety of conditions of risk. Accordingly, social problem solving deficits, social skills deficits, poor social coping skills, problems with peer relations, and family relationships have been identified as risk factors (e. g., suicide and substance abuse). These risk factors are co-occurring and have accumulative effect. For example, while substance abuse and suicidal risk are comorbid, substance abuse has been also identified as a risk factor for suicide. Thus enhancing the protective factors should be the strategy of choice in cases where risk factors are difficult to identify in advance for some disorders (Loeber et al., 1998).

While the broader developmental context includes factors such as the socioeconomic status, poverty and other ecological considerations impacting on child adjustment, they are much more difficult to address with school-based prevention efforts (Nafpakitis & Perlmutter, 1998). Therefore, other than the parent and familial variables, these environmental risk factors are not included as targeted aspect of the most school-based prevention programs.

Types of Intervention Modalities

Intervention can be categorized into individual or group; direct or indirect; psychoeducational training, counseling or consultation. These various types of interventions should be viewed on a continuum from group based psychoeducational training, indirect consultation to more individualized counseling/treatment according to the increase in the number of risk factors and the severity of the symptoms. Moreover, depending on the nature of specific risk factors, a combination of modalities, not a single modality, is better at addressing the needs. For example, a form of tertiary prevention utilizes a combination of individual, group and family consultation as well as training and counseling with the child, teacher, parents, family and peers.

Review of Preventive Intervention Programs: Primary Prevention

The goal of the primary intervention is to prevent occurrence or onset of problems. It is targeted at all students or at school-wide with the same intervention in the same manner at the same dosage level to reduce the incidence of

new problems. The procedure can include mental health consultation to teachers, family support programs, guidance counseling or psycho-educational services (e. g., information regarding substance use, school violence or teen pregnancy, etc). An example of a primary intervention targeted at social cognitive skill building is a Primary Intervention Program (PIP) Cowen, 1996). This is a school-based program designed for early detection and prevention of emotional, behavioral and learning problems in preschool through primary grade children with the use of paraprofessional child-aids. Through a systematic screening procedure, children at risk for school adjustment are identified. The program includes the aid training (2-day state training) and weekly supervision. It has been empirically proven to be effective in preventing school failure, reducing behavioral and emotional problems and promoting school adjustment (Greenberg et al., 2003).

The Primary Project is a preventive play therapy program centered in the theoretical underpinning of the child-centered therapy (Demanchick, 2005). It targets to enhance and maximize children's school adjustment and other related competencies and to reduce social, emotional, and school adjustment difficulties from pre-school through third grade. Using the trained paraprofessional child aids, play therapy is offered to children with evident or incipient school adjustment problems in the mild or moderate range. It is not for the children who already have serious dysfunctions.

The Second Step Program is a curriculum based model that focuses specifically on skills to understand and prevent violence. Its aim is to reduce or prevent aggression by teaching anger management, empathy and impulse control. The program also includes a video-based parents' guide to assist parents in reinforcing the lessons at home (Wicks-Nelson & Israel, 2003 & Greenberg et al., 2000). Other types of violence prevention or bullying prevention program targeted at Kindergarten to junior high school students teach four skills that are known to be associated with violence prevention: empathy, impulse control, anger management, and conflict resolution. Teaching strategies include discussion, video representations of school scenarios, role-playing, debriefing, and providing feedbacks. Parents are involved in the teaching and practice of target skills at home. Targeting at all aspects of child's functioning and involving significant adults like parents and teachers, Second Step is recommended as a best practice for making schools safer and violence- free (Greenberg et al, 2003).

Responding in Peaceful and Positive Ways (RIPP) program is another example of violence prevention program (Greeberg et al, 2000). The 25 session RIPP program focuses on social/ cognitive skill-building to promote nonviolent conflict resolution and positive communication, Program includes team building and small group work, role playing, and teaching relaxation

techniques. Given the natural tendency of children and adolescents for adherence toward peers and considering the prevalence rate of bullying, victimization, and school violence, the group work involved in the RIPP Program appears to have many benefits for children and adolescents in the Korean schooling context.

Among the other more general social/ emotional cognitive skill-building programs, the Interpersonal Cognitive Problem program (ICPS) program, now called I can Problem Solve (also ICPS) draws on the teacher involvement. The classroom teacher implements the ICPS program in small groups. Teachers teach children fundamental skills related to language, thinking, and listening and progresses to practicing more complex interpersonal problem solving through dialogue and role-playing (Shure, 1997). Promoting Alternative Thinking Strategies (PATHS) is another elementary-based program to promote social-emotional competence through cognitive skill building, with an emphasis on teaching students to identify, understand and self-regulate their emotions. The PATH include parents and school beyond the classroom to increase generalizability of the students' newly acquired skills. Similar programs target at transition (e.g., to middle school) as a normative life event which places children at increased risk for maladjustment. They focus on individual skill building to promote social competence, decision-making, group participation, and social awareness (for a review see Greenberg et al, 2000; NIDA).

While most school-based primary prevention programs are targeted at elementary grades, the Bullying Prevention Program (Olweus, 1993), which began as a nation-wide campaign in Norway is an example of primary prevention targeted at both elementary and middle school children. The program aims to reduce bullying and other victimization and is comprised of several facets. After assessing how wide spread the bullying problem is, the issue is addressed at school-wide meetings, through coordinating prevention committee among students to classroom discussions establishing and reinforcing rules against bullying and with individual discussions with bullies, victims and the parents of involved students. The Skills Training Program and the Aggressive Replacement Training/Skillstreaming the Adolescent (Greenberg et al, 2003) are examples of other programs that combine social competence building and violence prevention programs.

Of the primary interventions for older children and adolescents (e.g., suicide and substance abuse), the Life Skills Training (see Botvin) has the best evidence for effectiveness. It teaches students general personal and social coping skills and skills that are knowledge specific to prevention of substance use (e.g., facts about drugs). It has 5 components conducted in 7th (18 sessions) and 8th grade (10 sessions), and 9th grade (5sessions). Prevalence and effects of tobacco, alcohol, and marijuana use as well as addresses ways in which advertisers and other

attempts to influence substance abuse. A component of self-directed behavior change presents how self-image can be improved through use of a self-improvement plan. Self-assertiveness skills are also targeted to help resist peer pressure to smoke, drink, and use drugs. This component focuses on verbal and non-verbal communication skills including guidelines for avoiding misunderstandings, skills to initiate, maintain, and end conversations, and skills needed to maintain romantic relationship (Nafpakitis & Perlmutter, 1998). In general, the more comprehensive the scope of the skills targeted, the more effective the behavioral changes with these primary prevention programs (see NIDA).

Secondary Prevention or Targeted Prevention

Universal prevention may not be enough for all students. Students who are at risk for school failure, or display a chronic pattern of inappropriate behavior do not respond to universal prevention (only 5-15%) (Loeber et al., 1998). When some students continue to engage in inappropriate behaviors despite sound and clear school-wide discipline program, a more intense effort needs to be implemented. Group-based intervention for students at risk for school failure or developing more chronic behavior patterns is an example. Secondary prevention is necessary when a child is at risk for exhibiting problematic behaviors or beginning to display the symptoms of a behavioral-emotional disorder. Intervention can be targeted at those at-risk individuals who manifest anti-social behaviors or at a group of individuals with a known risk factor such as history of parental divorce or childhood trauma.

In general, secondary intervention requires more labor intensive and time-consuming procedures compared to primary intervention programs, The dosage of intervention itself is more intensive than universal/primary intervention. This is because secondary prevention is really not preventing but correcting the harm that has already been done by exposure to risk factors.

In order to target at the specific risks and to enhance the necessary protective factors associated with a specific problem or disorder, categorizing the target problem into internalizing and externalizing behaviors are often helpful. Disruptive or externalizing behavior disorders of childhood; oppositional defiant disorder (ODD); conduct disorder (CD); attention deficit hyperactivity disorder (ADHD) are among the most prevalent and stable child psychiatric disorders. On the one hand, children who are diagnosed with conduct disorder tend to carry the diagnosis into later years. Many of the more serious anti-social adult problems have their origin in early conduct problems. Accordingly, conduct problems are also one of the most difficult conditions to remediate. And early intervention is most crucial at those children

who are beginning to exhibit disruptive and aggressive behaviors.

On the other hand, the risk factors for conduct problems are multifaceted and thus intervention efforts need to address a range of different aspects of child's developmental context including parents, family and peer relations. In general, children with behavior disorders have poorer social skills and more cognitive distortions such as having more hostile and negative attributional biases and cognitive deficits in problem solving (Kazdin & Weisz, 1998, 2003).

As conduct problems are more often exhibited by boys than girls, cognitive-behavioral interventions that focus on developing anger management skills in aggressive elementary and middle-school aged boys such as the Anger Coping Program is an example of school-based secondary prevention program (Greenberg et al., 2003). This and other programs have direct teaching components including identification of feelings, teaching self-control and problem solving skills. Children also have opportunities to practice these skills in small groups using role-play and other interactive activities. Other similar programs also provide prosocial role models such as peers or mentors in the case of the Big Brother/Big Sister (BB/BS) mentoring program (Wicks-Nelson & Israel, 2003).

The following programs have been empirically proven to be effective as secondary intervention approaches. First of all, the First Step to Success is an early intervention program involving home and school collaboration (Greenberg, 2004). It involves identifying preschool through first grade students who display aggressive and disruptive behaviors or show developmental delays. Including a 6-week home program, it focuses on specific interventions with children individually and at group level. It also provides parent-effectiveness training and teacher training about the characteristics of many childhood problems such as ADHD. Bullying prevention education and coping with disruptive classroom behaviors are among other skills being taught in this program.

Other similar school-based secondary prevention programs focus on developmentally appropriate knowledge and skills building. Yet others focus on early intervention by providing crisis-intervention with children who have history of domestic violence, parental divorce and parental mental health problems. Victims of peer violence, bullies and children who need to adjust to new school are also targeted.

There are other programs that focus on social skills training including assertiveness training for children who are shy and withdrawn as well as those children who are socially rejected. But by far the best known secondary prevention program is the Head Start Program (for a review see Greenberg, 2000). This has the skill building components in problem solving, general social skills training as well as knowledge building with parents in terms of parenting skills and parent support group using behavioral

methods. Other empirically proven secondary prevention programs include the Anger Replacement Training (Goldstein & Glick, 1987) for adolescents. It teaches the adolescents to identify their own anger and to come up with better coping strategies. The program is comprised of three parts, learning the pro-social skills, anger management and teaching moral thinking. This and other similar social skills training programs utilize discussion, modeling, behavioral rehearsal and teaching of pro-social skills as well as assertiveness training. For example, the FAST Program is a family-based preventive intervention designed to improve the protective factors in families in which children exhibit behavioral and academic problems (Greenberg, 2004). It combines parent, parent-child and multi-family sessions to build social support surrounding the whole family.

The effectiveness of secondary intervention programs depends on the comprehensive coverage of the targeted skills across the child, parents and school as well as on the specificity of the content skills being taught. The key to success also depends on the generalizability of the skills learned to other realistic settings. Therefore, good programs provide more hands-on practice through interactive activities and also have longer follow up. Individual-level approaches such as individual therapy is effective only when cognitive behavioral methods such as behavior management and social skills training are done on one-on-one basis. Overall, the interface of prevention and treatment is an important curative factor.

Among internalizing disorders, anxiety disorders and mood disorders are most prevalent in childhood and thus have been the primary target of many prevention efforts. Because of the nature of internalizing disorders, however, not much is known about their school-based programs. Prevention programs that target youth with elevated internalized symptomatology are typically cognitive-behavioral and focus on cognitive deficits and distortions associated with the disorder. A suicide prevention with Life Skills Training (See Botvin) would be one such example. Youths with suicidal risks are the internalizers and have been called the "quietly disturbed" who manifest problem-solving deficits. Therefore, coping and problem-solving skills training are being used to target those with suicidal risk. Other problems target high risk children such as children from divorced parents or those who have experienced the death of a parent. An examples of school-based secondary intervention includes grief counseling done at the group level. Often these programs help the entire family manage the grief process through education and social support. There is a high degree of comorbidity between and within the externalizing and internalizing dimensions. Therefore, what is intented to target the risk factors for the externalizing disorders may end up enhancing skills necessary to cope with risk factors for internalizing behavior.

Tertiary Prevention Programs

Children who need to receive the tertiary prevention are those who have sub-threshold symptoms of diagnosable disorders such as mood disorders, anxiety disorders and other forms of childhood and adolescent psychopathology. It is also targeted at those children with a history of violence (domestic or school), abuse and neglect and other debilitating conditions. These children have either began to display the ill effects of their pathological environment or are exhibiting the symptoms of their diagnosis though not quite with the intensity that fulfill the formal diagnostic criteria. While they do not yet have the individualized educational plan in the special education system, they do require individualized treatment plan. The most effective school-based treatment at the tertiary level for emotional and behavioral problems comprises of behavior management and social skills training. Most of them require long-term (e. g., 20 weeks), more intense (both counseling and education) and diverse use of treatment modalities (individual, group, and family counseling) and a multisystemic approach (teacher, parent, administrators in addition to the identified child). Parent participation is a key to success with most school-based tertiary prevention particularly for those children who have conduct and other externalizing behavior problems. As the quality of parent-child relationship and parenting style are closely related to the onset and maintenance of those problems, (e.g., coercive parenting evidenced with the parents of antisocial boys and negative attributional bias of ADHD parents), interventions targeted at the familial level need to be an integral part of the program. Yet the child's problems in part reflect the dysfunctionality in the family environment, therefore, enlisting parental involvement at the tertiary level for children with anti-social behaviors is a difficult task. Hence, there is the scarcity of effective tertiary prevention programs.

One exception is the Behavioral Parent Training (Patterson & Oregon Social Learning Center), which focuses on breaking the coercive cycle in the parent-child relationship with antisocial boys. It includes parent education, parent and family counseling based on the structural family therapy, along with individual counseling and school-based behavior management contingency plan for the child. The other one is the Multisystemic Family Therapy, which targets the most serious antisocial group of adolescents from the most impoverished socio-economic status with multiple risk actors (Henggler, Melton, Brondino, Scherer, & Hanley, 1997). Similar to the Behavioral Parent Training, it relies heavily on the parent involvement. In addition to the parenting knowledge and general problem solving skills building, attention is extended to providing financial and social welfare support for the families to increase their participation in the treatment program.

Providing treatment for high risk children is

beyond the scope of school-based programs. This reduces the potential benefits of school-based tertiary prevention programs since the more severe the symptoms, the more multi-dimensional and multifaceted the risk factors are. Nonetheless, the level of delinquency and other anti-social behaviors are on the rise. And compulsory education through middle school makes it difficult to enforce the ultimate disciplinary actions against antisocial behaviors. Therefore, schools are forced to address many serious problems. Often the goal of the school-based tertiary prevention problems is not to treat these serious high risk behaviors but to protect other children from the ill effects.

Discussions and Directions for Further Inquiry and Research Common Characteristics of Effective Programs

At best, short-term preventive interventions produce time-limited benefits with at risk groups whereas multi-year programs are more likely to foster enduring benefits. Direct teaching of specific skills or abilities linked to specific problem (e.g., substance abuse or suicide) and general coping skills (e.g., decision-making skills) are key ingredients in most effective programs. Starting at the developmentally appropriate level and continuing with on-going interventions are better at treating serious problems. For example, the prime time for the emergence of minor and moderate forms of delinquency is in the elementary school age period, whereas the middle school period is the most crucial time for the emergence of more serious forms of delinquent acts (Kazdin & Weisz, 2003; Loeber et al, 1998). Therefore, effective prevention programs target children at key transitional periods (e.g., entry to preschool or transition from elementary to middle school) (Johnson, et. al, 2005). The content of the programs focuses on personal and social coping skills, through the use of interactive methods of teaching and also have provision for adequate training for those directly involved in program implementation Extension of programs through long-term follow up was another key element as in the case of the violence prevention program with a three year follow up. Interventions at multiple levels (child, family, school and community) were important for more severe problems. Targeting multiple systems of children's development by simultaneously enhancing children's competence and promoting effective behavior interactions across school and home settings are also identified as key characteristics of effective prevention programs (Greenberg et al., 2001). These components are deemed necessary to ensure health adjustment for child/adolescents: personality traits, family cohesion, and community were targeted. The more serious the problem, the longer and the more intense the treatment with an earlier point of entry and with more multidimensional interventions are needed. The equifinality of diverse risk factors

leading to a same disorder makes it necessary to target different skills levels to produce the desired effect of reducing one risk factor. In doing so, several protective factors are enhanced resulting in building resilience to future adversaries.

The above reviewed programs rely on mostly on cognitive-behavioral strategies involving direct teaching with minimal individual counseling except in those high risk situation where parent counseling and education are provided. With the shortage of expertly trained mental health professionals in the school and with many of the counselors being part-time, primary prevention programs offer ideal alternatives to predominately individual counseling services being rendered at schools. Prevention before the onset of disorders makes it more cost effective as well as raise the level of overall awareness toward mental health and adjustment not only for the children but also for their families and the whole school. Future inquiries into school-based prevention programs for the childhood behavioral and emotional disorders should evaluate ways to modify and implement some of these programs or components of different programs within the existing schooling context.

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<특별기고>

정서-행동장애아의 예방 및 치료: 학교장면에서의 예방적 개입

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본 연구에서는 학교장면에서의 정서-행동장애의 개입을 위한 예방적 프로그램을 개괄하였다. 동일한 원인요인이 다양한 정서-행동 장애로 또한 다양한 위험요인들의 역동적 상호작용의 결과가 유사한 증상 혹은 동일한 장애로 나타나는 아동기 발달병리의 특성을 감안하여 조기 개입의 중요성을 전제하였고 미국의 학교 장면에서의 효과가 경험적으로 검증된 예방프로그램을 일차적, 이차적, 삼차적 수준으로 분류하여 분석하였다. 효과적인 개입 프로그램들은 발달단계에 적합한 구체적인 위험요인 및 보호요인을 겨냥하여 주로 영역별 문제 해결 기술과 대안적 대처 방안을 기술의 특면에서 다양한 경험적이고 행동적인 방법으로 주로 전체 학교 단위나 위험아동 집단을 겨냥한 형태로 직접 학습시키는 공통점을 갖고 있는 것으로 나타났고 장기적인 follow-up을 포함하는 것으로 파악 되었다. 또한 문제행동의 수준이 높을수록 지적된 아동뿐만 아니라 부모, 교사, 혹은 또래 집단 등 아동의 맥락적 요인들을 개입 장면에 포함시키는 다 체계적 접근과 또한 개별적 훈련과 상담, 부모 훈련 및 가족 치료 그리고 교사 자문 등 다양한 개입방법을 사용하는 것으로 파악되었다. 학업 성취에 대한 압박, 상대적으로 부족한 전문 상담교사의 비율 및 지역사회 정신건강 서비스의 취약성 등을 고려하여 우리나라의 아동. 청소년의 정신건강의 요구를 학교장면에서 현실적으로 대처하는 방안으로 일차적, 이차적 예방적 개입방법의 절충적 활용을 적극 건의 하였다.

주요어 : 정서-행동장애, 아동기 청소년기 발달 병리, 예방적 개입, 학교장면에서의 개입