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Implementation Of A Pilot Project For The Treatment And Prevention Of Substance Abuse In Children And Adolescents: Strengthening Families For Parents And Youths 12-16

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IMPLEMENTATION OF A PILOT PROJECT FOR THE TREATMENT AND PREVENTION OF SUBSTANCE ABUSE IN CHILDREN AND ADOLESCENTS: STRENGTHENING FAMILIES FOR PARENTS AND YOUTHS 12-16

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Key words: adolescents, substance abuse, protective factors, risk factors, resilience, communication

SUMMARY

Background: An evaluation of substance abuse services in Barbados has identified the need for programmes and services that are specifically designed for children and adolescents.

Aim: To conduct an evidence-based programme to reduce the incidence of substance abuse among children and adolescents by strengthening the family unit through positive parenting, enhanced family functioning and youth resilience.

Method: Two pilot projects were conducted based on the 'Strengthening Families for Parents and Youths 12– 16' (SFPY) programme. The nine-week programme was employed as an intervention to create stronger family connections, increase youth resiliency and reduce drug abuse among children and adolescents between the ages of 11 to 16. The decision was made to include participants from age 11 since children may be in the first year of secondary school at this age.

Results: Fifteen families participated in two pilot projects and an evaluation conducted at the conclusion showed that the youth were generally more positive about their perceived place in the family unit and felt that the being in the programme was generally beneficial. The parents similarly reported they had a more positive relationship with their youths and also had a better understanding of their needs, and an awareness of their developmental changes. This affirmed that the programme had achieved its desired outcome to create stronger family units.

Conclusion: The SFPY Pilot Project was successful in making parents and youths more aware of their individual needs and responsibilities within the family unit. As a result relationships within their respective families were strengthened. Evidence-based studies have shown that enhanced family functioning decreases the incidence of substance use and abuse in the adolescent population by increasing protective factors and decreasing risk factors. The implementation of the programme, which was developed and tested in the North American environment, demonstrated that it was transferable to the Barbadian society. However, its full impact can only be determined through a comparative study involving a control group and/or an alternative substance abuse intervention. It is therefore recommended that a comparative study of the SFPY intervention should be delivered to a representative sample of adolescents who are at an earlier developmental stage. Evidence has shown that the programme is more effective, with longer impact on youths who participate at a younger age.

IMPLEMENTAÇÃO DE PROJETO PILOTO PARA TRATAMENTO E PREVENÇÃO DE ABUSO DE SUBSTÂNCIAS EM CRIANÇAS E ADOLESCENTES: FORTALECIMENTO DA RELAÇÃO FAMÍLIAR ENTRE PAIS E JOVENS DE IDADES ENTRE 12 E 16 ANOS

Heather Payne-Drakes

Palavras-chave: adolescentes, abuso de substâncias, fatores de proteção, fatores de risco, resistência, comunicação

RESUMO

Antecendentes: Uma avaliação dos serviços de abuso de substâncias em Barbados identificou a necessidade de programas e serviços que são projetados especificamente para crianças e adolescentes.

Objetivo: Realizar programa com base em evidências para reduzir a incidência de abuso de drogas entre crianças e adolescentes por meio do fortalecimento da unidade familiar através de parentalidade positiva, de maior funcionamento familiar e de resistência dos jovens.

Método: Dois projetos-piloto foram realizadas com base no programa "Fortalecer as Famílias para Pais e Jovens de 12 a 16 anos (SFPY). O programa de nove semanas foi empregado como uma intervenção para criar laços familiares mais fortes, aumentar a resistência dos jovens e reduzir o abuso de drogas entre crianças e adolescentes de idades de 11 a 16 anos. A decisão foi tomada para incluir participantes de 11 anos desde que as crianças possam estar no primeiro ano da escola secundária nessa idade.

Resultados: Quinze famílias participaram em dois projetos-piloto e a avaliação final mostrou que os jovens após o programa, geralmente tornaram-se mais positivos sobre o seu lugar na unidade familiar e sentiram que sua participação no programa foi benéfica. Os pais, da mesma forma, relataram que eles conquistaram, com o programa uma relação mais positiva, uma melhor compreensão das necessidades, e consciência das mudanças de desenvolvimento de seus jovens. Desta forma, considera-se que o programa atingiu o resultado desejado de criar unidades familiares mais fortes.

Conclusão: O Projeto Piloto "SFPY" foi bem sucedido em fazer pais e jovens mais conscientes de suas necessidades individuais e de responsabilidades dentro da unidade familiar. Como resultado, o relacionamentos das respectivas famílias melhorou. Estudos baseados em evidências têm demonstrado que um relação familiar mais forte diminui a incidência de uso e abuso de drogas na população adolescente, aumentando os fatores de proteção e diminuindo os fatores de risco. A implementação do programa, que foi desenvolvido e testado no ambiente norte-americano, demonstrou que era transferível para a sociedade de Barbados. No entanto, seu impacto total só pode ser determinado através de um estudo comparativo envolvendo um grupo de controle e / ou uma intervenção alternativa ao abuso de substâncias. Portanto, é recomendável que um estudo comparativo da intervenção SFPY deve envolver uma amostra representativa de adolescentes que estão em estágio de desenvolvimento anterior mais cedo. Evidências já demonstram que o programa é mais eficaz, com impacto mais longo sobre os jovens que participam em uma idade mais jovem.

EJECUCIÓN DE PROYECTO PILOTO PARA EL TRATAMIENTO Y PREVENCIÓN DE ABUSO DE SUSTANCIAS EN NIÑOS Y ADOLESCENTES: FORTALECIMIENTO DA LA RELACIÓN FAMILIAR ENTRE PADRES Y JÓVENES ENTRE 12 A 16 ANOS

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Palabras clave: adolescentes, abuso de sustancias, los factores de protección, factores de riesgo, la resistencia, la comunicación

RESUMEN

Antecedentes: Una evaluación de los servicios de abuso de sustancias en Barbados se ha identificado la necesidad de programas y servicios que están diseñados específicamente para los niños y adolescentes.

Objetivo: Realizar programa basado en la evidencia para reducir la incidencia de abuso de sustancias entre los niños y adolescentes mediante el fortalecimiento de la unidad familiar a través de la crianza positiva, de mayor funcionamiento familiar y de resistencia de los jóvenes.

Método: Dos proyectos piloto basados en el programa "Fortalecer a las Familias para Padres y Jóvenes de 12 a 16 'años" (SFPY). El programa de nueve semanas fue empleado como una intervención para crear lazos familiares más fuertes, aumentar la capacidad de recuperación juvenil y reducir el abuso de drogas entre los niños y adolescentes entre las edades de 11 a 16. Se tomó la decisión de incluir a participantes de 11 años de edad ya que los niños puedan estar en el primer año de la escuela secundaria a esa edad.

Resultados: Quince familias participaron en dos proyectos piloto y de una evaluación final mostraron que los jóvenes después del programa llegaran a ser mas positivos en general, acerca de su lugar en la unidad familiar y sintieran que el ser en el programa fue en general beneficioso. Los padres, de manera similar, informaran que conquistaran, con el programa una relación más positiva, una mejor comprensión de necesidades y la conciencia dos cambios en el desarrollo de sus jóvenes. Por lo tanto, se considera que el programa había logrado el resultado deseado de crear unidades familiares más fuertes.

Conclusión: El Proyecto Piloto "SFPY" tuvo éxito en hacer que los padres y los jóvenes más conscientes de sus necesidades y de responsabilidades individuales dentro de la unidad familiar. Como resultado, las relaciones dentro de respectivas familias mejoraron. Los estudios basados en la evidencia han demostrado que una relación familiar más fuerte disminuye la incidencia de consumo de sustancias y el abuso en la población adolescente mediante el aumento de los factores de protección y disminuindo los factores de riesgo. La ejecución del programa, que fue desarrollada y probada en el medio ambiente de América del Norte, demostró que era transferible a la sociedad de Barbados. Sin embargo, su impacto sólo puede ser determinado a través de un estudio comparativo con un grupo de control y / o una intervención alternativa al abuso de sustancias. Por tanto, se recomienda realizar un estudio comparativo de la intervención SFPY debe envolver una muestra representativa de adolescentes que se encuentran en una etapa de desarrollo anterior. La evidencia ha demostrado que el programa sea más eficaz, con efectos más largos en los jóvenes que participan en una edad más joven.

Contents

AIM OF PAPER

This paper will outline the process of implementing a substance abuse programme for children and adolescents. The programme, Strengthening Families for Parents and Youths 12-16 (SFPY), was implemented through two pilot projects conducted over a 12 month period. The pilot projects were not intended to measure outcomes or provide empirical research data, but rather were directed at implementing a theoretical evidence-based intervention utilizing, existing resources and involving participants who were known to be in need of such services. The primary objective was to strengthen the existing substance abuse services for children and adolescents. As a result, there were no control groups established to compare the outcome of the pilot project with the outcome of a non-intervention group. The built-in evaluation conducted at the end of each intervention was designed solely to test participants' response to the actual programme and not to empirically measure programme outcomes.

The aim of the paper will be to:

(a) Describe the developments leading up to the SFPY intervention

(b) Assess the process of multifamily dimension interventions

(c) Describe the process of implementing the SFPY programme - selection of participants, training of facilitators, registration and orientation of participants, implementation of the programme

(d) Review literature on family-based substance abuse interventions to provide a theoretical framework for the implementation of SFPY.

(e) Evaluate the implementation of the SFPY pilot project through: (i) Focus Groups conducted at the mid-way point and (ii) Questionnaire conducted during the final session of the intervention. These exploratory methods of data collection will in

turn provide a preliminary overview of the response to the programme and lay the foundation for empirical research on the implementation of the SFPY programme on a national level.

THE MANAGEMENT OF SUBSTANCE ABUSE IN BARBADOS: STRENGTHENING THE SUBSTANCE ABUSE PROGRAMME THROUGH EVIDENCE-BASED INITIATIVES

The government of Barbados established a public/private sector partnership for the provision of substance abuse services in 2001 with the major treatment providers. In 2008 a decision was made to evaluate the residential treatment programmes to determine the extent to which the need for substance abuse services was being met. A report of this assessment was completed in 2009 with technical assistance from PAHO/WHO. Recommendations coming out of the evaluation included the provision of services for women, children and adolescents. As a result of this recommendation a decision was made to implement a substance abuse programme for children and adolescents.

On November 2-3, 2011 the Ministry of Health in collaboration with the Pan American Health Organization (PAHO) and the Centre for Addiction and Mental Health (CAMH), a PAHO Collaborating Centre in Canada, convened a multi-sectoral workshop with various stakeholders to provide direction for substance abuse programmes for children and adolescents in Barbados. The objectives of the Workshop were to:

1. Summarize international best practices and evidence-based approaches to be considered in the development of a substance abuse pilot programme for children and adolescents in Barbados with a focus on prevention and treatment

2. Present concrete recommendations for short and long-term strategies to support the development of a substance abuse pilot programme for children and adolescents in Barbados.

The Report on the Substance Abuse Programme for Children and Adolescents (SAPCA) Workshop 2011 provided an overview of the key elements for consideration in the development of prevention and treatment programmes for children and adolescents. General recommendations for the development of a substance abuse pilot programme for children and adolescents in Barbados were also provided in the Report.

The importance of developing and implementing appropriate and effective prevention and treatment interventions for this population group was emphasized, particularly in view of the fact that most substance use is initiated during childhood and adolescence. The adverse impact that substance use may have on this developmental stage further support the need for an intervention target this age group. The Substance Abuse and Mental Health Services Administration (US) substantiates this need in its 1999 Report which states that the onset of substance use is occurring at younger ages, resulting in more adolescents entering treatment for substance use disorders with greater developmental deficits and perhaps much greater neurological deficits than have been observed in the past. Other consequences of substance use and abuse include alcohol- and drug-related traffic accidents, delinquency, sexually risky behavior, and psychiatric disorders.

It is envisioned that addressing the issue of substance use and abuse in this age group would reduce the incidence of drug use among young persons and in time reduce the incidence of drug use in the adult population and its negative socio-economic impact at the national level.

This strategy also recognises the direct correlation between drug use and the incidence of mental illness, and the lifelong impact that both may have on youths.

The necessity for this intervention is further demonstrated by the results of the Secondary School Survey (2010) of 11-17 year olds in public and private schools in 12 Caribbean countries which reported prevalence for lifetime use of cigarettes at 21.46%; lifetime use of alcohol at 75.6 %; cannabis at 18.97%; inhalants and cocaine at 18% and 2% respectively.

This trend may be compared with findings from the US *1997 National Household Survey on Drug Abuse* conducted by the Substance Abuse and Mental Health Services Administration which indicated that substance use among 12 to 17 year old children rose to 11.4 percent with illicit drug use among 12 and 13 year olds increasing from 2.2 to 3.8 percent. This survey also demonstrated that perceived risk of harm from substance use is falling while the availability of drugs is climbing and thus pointed to a major national problem, especially as the social and economic costs of adolescent substance use are becoming better understood.

The importance of tailoring interventions to children to meet their specific developmental, emotional and physiological characteristics was also emphasized in the US *1997 National Household Survey on Drug Abuse.* It was noted that this approach was necessary because adolescent users differ from adults in many ways. Their drug and alcohol use often stems from different causes, and they have even more trouble projecting the consequences of their use into the future. Physiological differences such as smaller body sizes and lower tolerances put adolescents at greater risk for alcohol-related problems even at lower levels of consumption. Further, the use of substances may also compromise an adolescent's mental and emotional development from youth to adulthood because substance use interferes with how people approach and experience interactions. As a result treatment approaches for adolescents

must be adapted to their unique developmental issues, to differences in their values and belief systems, and to include environmental considerations such as peer influences.

The Survey therefore concludes that:

> "*The treatment process must address the nuances of each adolescent's experience, including cognitive, emotional, physical, social, and moral development. An understanding of these changes will help treatment providers grasp why an adolescent uses substances and how substance use may become an integral part of an adolescent's identity.*" (*Treatment Improvement Protocol (TIP) Series, 1999 No. 32)*

IMPLEMENTING KEY RECOMMENDATIONS: THE DESIGN AND IMPLEMENTATION OF AN INTERVENTION PROGRAMME

The Report on the Substance Abuse Programme for Children and Adolescents (SAPCA) Workshop 2011 made several key recommendations for strengthening substance abuse services and developing an intervention that would impact children and adolescents. Included in the Report were recommendations to:

1. Establish a Working Committee that would be responsible for designing and implementing an appropriate intervention
2. Design a comprehensive pilot project with both prevention and treatment components, that is based on best practice approaches and the reality of the local situation
3. Define a concrete plan for the implementation of a sustainable pilot project
4. Foster partnerships and commitment for the implementation of the pilot project

5. Develop a capacity building strategy
6. Provide a relevant role to primary health care in the initiative
7. Include a built-in evaluation process

The first Meeting of the Working Committee was held on November 23, 2011 and subsequent discussions resulted in a consensus to adopt a bio-psychosocial approach to addressing substance abuse in children and adolescents. This decision was based on the premise that drug abuse may be viewed as a manifestation of underlying biological, familial, psychological, social and spiritual factors and that the abuse may also inhibit physical, mental, emotional, and spiritual health and well-being. The bio-psychosocial approach was also considered more appropriate to address the social implications of substance abuse as it relates to family and other social relationships, school, work, health and legal status. The Working Committee also agreed that any intervention to be implemented should meet specific needs of children and adolescents, taking the reality of their situations into consideration to include meaningful engagement and skills building.

Based on evidence provided at the November Workshop, the Working Committee agreed further that the intervention should also include components aimed at promoting healthy and supportive environments in which children and adolescents could develop with the support of their families. It was also noted that engaging youths and their parents would potentially have lasting benefits that extend beyond reducing substance use. These prerequisites led the Working Committee to identify an intervention based on the Strengthening Families Programme for implementation.

The approach agreed on by the Working Committee is in keeping with the Centre for Substance Abuse Treatment's protocol for adolescents with substance use disorders. The Protocol states that:

> *"Clinicians have found that effective treatment of the adolescent almost always involves the family, and the effectiveness of family therapy has been documented extensively, particularly among those substance-using adolescents who are normally the most difficult to treat."* (*Treatment Improvement Protocol (TIP) Series, 1999 No. 32)*

This assessment was made in relation to three treatment methodologies utilised in interventions for children and adolescents. These include the 12-Step-based treatment, treatment in the adolescent therapeutic community and family therapy.

ASSESSMENT OF FAMILY-BASED INTERVENTIONS

Treating individuals as subsystems within the family system and as units of assessment and intervention is the basis for contemporary family therapy approaches. Family-based treatments work with multiple units, including individual parents, adolescents, parent-adolescent combinations, and whole families. Other comprehensive family approaches also target extended systems including the peers of adolescents, the school, and the neighborhood which are seen as contributing factors to dysfunctional interactions in families. Interventions are therefore directed at changing the way family members relate to each other through an examination of underlying causes of current interactions (Centre for Substance Abuse Treatment, 1999).

These interconnected relationships are widely recognized as crucial elements of substance use disorders and therefore critical in the design of interventions for prevention and treatment. In addition to family factors, the environment has also been shown to contribute to

adolescent substance use behaviors. Substance use disorders among adolescents are therefore characterized as multidimensional and thus require a multidimensional solution.

There have been a number of related variants of substance use disorder treatment programs over time with family-related components. These included family-based therapy, family-centered therapy, or family therapy with varying services from one treatment programme to another. Multidimensional family therapy started in the 1930s when social scientists began to understand that family members are interconnected and interdependent parts of a wider social system.

Multidimensional Family Therapy

The Strengthening Families for Parents and Youth 12-16 (SFPY) may be compared to Multidimensional Family Therapy which was developed to target the adolescent population. The California Evidenced-Based Clearing House for Child Welfare Multidimensional Family Therapy (MDFT) was developed to target the adolescent population aged 11 to 18 who were experiencing problems related to substance abuse delinquent/conduct disorder, school and other behavioural problems, in addition to internalizing and externalizing symptoms.

This approach employs goals that are based on empirical research on normative adolescent development and on developmental psychopathology. "Adolescent substance abuse is understood as existing in a context of other, interrelated problems, such as poor relationships, deficits in cognitive and problem-solving skills, learning and school difficulties, low self-esteem, family stress or dysfunction, and movement onto a trajectory of failure and incompetence" (The California Evidenced-Based Clearing House for Child Welfare 2006-2012). Evidence from research has led the focus on issues such as interdependence, autonomy connectedness and the parent–adolescent relationship in the MDFT treatment model.

Encompassing this is the multifaceted solutions which take the cognitive, affective, behavioural, temporal problems into consideration. While the family's unique characteristic are taken into consideration, the development of strong therapeutic alliances with the parent(s) and with the adolescent is seen as an overriding goal (Shelef et al, 2005).

It is reported that MDFT is superior or equal to other types of well-established drug-abuse treatments such as Cognitive Behavioural Therapy and adolescent group therapy in a number of studies. Drug use and problem behaviours have been shown to be positively influenced at the conclusion of a MDFT intervention. During this process therapists work simultaneously in four interdependent domains: the adolescent, parent, family, and extra-familial. Focus is placed on facilitating behavioural and interactional change only after therapeutic alliance is established and youth and parent motivation is enhanced.

Adolescents are helped to develop coping, emotion regulation, and problem solving skills; improve social competence; and establish alternatives to substance use and delinquency. For parents, the focus is on enhancing parental teamwork and improving parenting practices. The family component concentrates on decreasing family conflict, deepening emotional attachments, and improving family communication and problem solving skills. The final component, the extra-familial domain, focuses on fostering family competency in interactions with social systems such as justice, educational, social welfare services. Concretising behavioural and relational changes is then reinforced by the MDFT model to guarantee that treatment gains are preserved.

While the SFPY has similar objectives as the MDFT to improve parenting practices, family problem solving skills, parental teamwork, and parent functioning, it does not include the extra-familial component which is geared to maximize the family's interactions with the various

social services to ensure that comprehensive care is obtained. The SYPY more closely correlates to an earlier *paradigm* of family-based therapy which focuses on risk and protective factors by working with families to reduce the risk factors and increase the protective factors. This model is commonly used in adolescent substance use prevention programs as well as treatment.

SFPY is based on the biopsychosocial model and other empirically based family and risk and protective factor models. These models include the resiliency model and the social ecology model of adolescent substance use. They articulate categories of empirically-based risk and protective factors that influence substance use and other problem behaviours. Targeted risk factors include, for example, poor discipline skills and poor quality of parent-child relationships. Protective factors targeted by SFPY focus on resiliency characteristics in youth, including empathy, as well as parent-child bonding. In part, resilience-related characteristics in youth are hypothesized to reduce substance use and other problems behaviours through their positive influence on youth coping skills to improve management of strong emotions and problem solving. (Spoth, Redmond, and Shin, 2001)

In a review of "Best Practice Initiatives for Adolescent Drug Use' the United States Department of Health and Human Services states that the MDFT treatment approach has been recognized as one of a new generation of comprehensive, multicomponent, theoretically-derived and empirically-supported adolescent drug abuse treatments. This was demonstrated in the results of a controlled clinical trial involving one hundred and eighty-two clinically referred marijuana and alcohol abusing adolescents who were randomized to one of three treatments: multidimensional family therapy, adolescent group therapy and multifamily educational intervention. Each treatment represented a different theory base and treatment format. All treatments were manualized and delivered on a once-a-week outpatient basis. The length of each

treatment was controlled so that each arm consisted of 14-16 weekly office-based therapy sessions. A theory-based multimodal assessment strategy measured symptom changes and prosocial functioning at intake, termination, and 6 and 12 months following termination.

Participants were drug using adolescents of median age of 16 who at the time of intake had, on average, a 2.5 year history of drug use. The study demonstrated that adolescents receiving Multidimensional Family Therapy in comparison to youth who received CBT had better initial results and continued to improve after termination.

There was a significant difference between treatment arms on parent's report of their child's externalizing symptoms, with adolescents receiving Multidimensional Family Therapy continuing to improve after termination, and adolescents in the Cognitive Behavioural Therapy condition showing a levelling off of symptom reduction. Finally, with respect to internalizing symptoms, there was a significant difference between treatments with respect to adolescents' report of their symptoms with youth in Multidimensional Family Therapy condition reporting continued improvement after treatment; while adolescents in the Cognitive Behavioural Therapy condition appearing relatively stable after suspension of treatment.

The clinical trial further showed that the rate of improvement of symptoms between the two treatments is different such that only MDFT was able to maintain the symptomatic gain after termination of treatment. Multidimensional family therapy shows a significantly different slope from Cognitive Behavioural Therapy suggesting that youth who received MDFT continued to evidence treatment improvement after termination. The advantage of MDFT concerns its ability, to retain the effects of treatment beyond the treatment phase.

Role of Therapeutic Alliance

In another study 'Adolescent and Parent Alliance and Treatment Outcome in Multidimensional Family Therapy', the authors examined the relation between adolescent and parent therapeutic alliances and treatment outcome among 65 substance-abusing adolescents receiving multidimensional family therapy (Shelef et al, 2005). Observer ratings of parent alliance predicted premature termination from treatment. It was shown that the association between adolescent alliance and substance abuse and dependency symptoms at post treatment was moderated by the strength of the parent alliance. Results reveal the unique and interactive effects of the two alliances on treatment outcome and emphasized the need for a systemic and well-articulated approach to developing and maintaining the multiple alliances inherent to family therapy.

The authors observed that over the past 25 years, a tremendous amount of research has accumulated indicating that the quality of the therapeutic alliance, or the degree to which the client and therapist care about one another and agree on the goals and tasks of therapy, is a modest yet robust predictor of treatment outcome in individual psychotherapy with adults. This study examined the relation between adolescent and parent therapeutic alliances and treatment outcome among 65 substance-abusing adolescents receiving multidimensional family therapy. Observer ratings, but not self-report, of adolescent alliance predicted adolescents' substance abuse and dependency symptoms at post treatment, as well as days of cannabis use at 3-month follow-up.

Three important reasons have been given for investigating the role of the therapeutic alliance in family therapy. The first relates to the large portion of adolescents who receive family-based interventions to treat externalizing symptoms, such as substance abuse and

delinquency, and thus the need to determine efficacy. The second relates to the substantial empirical support for family-based intervention models within this population, and the third relates to the fact that family-based models involve multiple participants and, consequently, require the development and maintenance of multiple alliances.

While some authors have pointed out the importance of forming an alliance with the parents of adolescents exhibiting behaviour disorders, others have emphasized the importance of simultaneously building an alliance with the adolescent. It is generally agreed that each alliance bears some impact on one or more aspects of treatment outcome and systems theory further suggests a likely interactive effect between the various alliances. That is, the strength of one alliance likely moderates the impact of the other on treatment outcome. It has therefore been established that a sufficiently strong parent–therapist alliance may be necessary to realise the effect of a moderate-to-high adolescent-therapist alliance, and vice versa.

Others have emphasized the importance of simultaneously building an alliance with the adolescent. They suggest that for treatment to be successful, the therapist must incorporate the adolescents' concerns and desires into the treatment process. It is determined that only when the adolescent trusts that the therapist understands and acknowledges his or her trials and aspirations, and therapy is transformed into a personally meaningful endeavour, that treatment can be successful.

THEORETICAL FRAMEWORK FOR FAMILY-BASED APPROACH TO SUBSTANCE ABUSE INTERVENTIONS FOR CHILDREN AND ADOLESCENTS

In a comparative review of adolescent substance abuse treatment outcome, Williams et al (2000) found that adolescents who received treatment had reduced substance use and other problems in the year following treatment. The average rate of sustained abstinence observed was

38% at six months and 32% at 12 months. Variables most consistently associated with successful outcome in the review were treatment completion, low pretreatment substance use and peer/parent social support nonuse of substances.

That review did not find enough evidence to compare the effectiveness of different forms of treatment types, but it established that outpatient family therapy appeared superior to other forms of outpatient treatment. The evidence also established that treatment is more effective than non-treatment.

Williams et al noted that there have been several reviews and commentaries on adolescent treatment literature and indicated that the most thorough has been that of Catalano, Hawkins, Wells, Miller, Brewer (1990/1991). That review identified 16 treatment outcome studies and an additional 13 that looked at factors affecting treatment progress or treatment outcomes. Four of these studies were multi-site, multi-programme evaluations. Catalano and colleagues concluded that treatment was more likely better than no treatment, but no one type of treatment was seen as superior in comparison to the others.

Pretreatment factors associated with outcome were race, seriousness of substance use, criminality and educational status. During-treatment factors predictive of outcome were time spent in treatment for residential programmes, involvement of family in treatment, experienced staff who used practical problem solving, and programmes that provided comprehensive services to include services related to school, recreation, vocation and contraception. Post-treatment factors were reported as having the most impact on outcome. These included involvement in work and school, association with non-using friends, and involvement in leisure activities.

Limitations have however been pointed out in this and other studies including the small number of outcome studies that have been done which makes the results very tentative. A

second major problem concerns poor methodology and quality of adolescent treatment studies that do exist. Problems related to poor methodology include small sample sizes, lack of treatment follow-up, poor follow-up rates, failure to include treatment drop outs in the results and lack of control groups are characteristic of these studies. Only 4 of the 16 studies cited by Catalano had control groups. It was further reported that 10 of the studies did not report drug use at discharge or post discharge.

There have however been many studies since 1991 and this review examines some of these to provide a more updated review on treatment effectiveness factors that affect outcomes. The total number of studies reviewed by the authors was 53 which were noted as a relatively small number when it was considered that in 1991 a total of 3000 adolescent treatment programmes were recorded in the US by the US Department of Health and Human Services. One of the reasons given for the small number of reviews was that research on substance abuse programmes for adolescents started more recently than that for adults. Only 3 of the studies reviewed were published in the 1970s versus 19 in the 1980s and 32 in the 1990s.

The client characteristics of participants within the studies reviewed showed that the populations appear homogenous. When demographic features were assessed 90% of the studies were found to have had an average age range between 15 and 17; while in 96% of the studies males made up the majority of the population. Features in the patterns of substance abuse were also similar with the majority of studies showing that the majority of adolescents were polydrug users; with alcohol and marijuana the most commonly used substances. In addition, many of the studies reported high levels of associated family, school, legal and psychological problems. Approximately half of the substance abusing adolescents had comorbid mental disorders.

Characteristics of the treatment programmes themselves showed a great range of diversity, unlike the homogeneity of the clients. Programmes were shown to vary in locations (hospital or substance abuse treatment facility); intensity (residential, day care, outpatient); duration (few sessions to over a year); and comprehensiveness – theoretically focused or eclectic, provide a broad range of services (substance abuse in addition to recreational, educational, social and psychiatric services); and the number of modalities by which the programme is delivered – group therapy, individual, group or family therapy.

Treatment Programmes

Reviewed treatment programmes were grouped into four types with some degree of overlap. The first of these is the "Minnesota model", a short 4-6 week hospital inpatient programme which typically offers a comprehensive range of services. It sometimes has an Alcoholics Anonymous or Narcotics Anonymous 12-step orientation and is often followed by outpatient treatment.

The second type of treatment is outpatient programmes which usually focus on individual counseling, and which may also provide group therapy and family therapy. Outpatient therapy is generally less intensive that inpatient with 1-2 sessions a week, but of longer duration which may last from one session to six months.

The less common type of treatment is the therapeutic community, which is generally of duration of 6 months to 2 years and which provides specialized substance abuse treatment. These are usually highly regimented settings with treatment facilitated by paraprofessionals, but run by residents themselves. Members advance through a hierarchy of responsibilities within the community of former substance abusers. Older programmes in this category had limited adolescents but newer programmes have been developed exclusively for adolescents. They have

retained the indoctrination and highly structured system but some of them are day care with clients living with the families of adolescents who have progressed in treatment. The rigid structure and length of treatment in therapeutic communities have resulted in high dropout rates ranging from 34% to 90%, with a median of 75%.

The fourth type of treatment programme documented is "Outward Bound", a life skills training programme which is sometimes presented as the primary treatment or as a supplemental to other treatment types. This type of programming usually takes the form of a 3-4 weeks outing that exposes adolescents to a non-drug life style and exposes them to challenges intended to develop character and promote resistance to drugs. In addition to these types of formal interventions, many high schools in the USA have group counseling on site for substance use and abuse. These informal treatments usually target kids at earlier drug use and are implemented with no formal studies or evaluations.

Treatment Limitations and Recommendations for Improvement

In measuring success, the review of the studies by Williams et al found that abstinence is more widely assessed, but indicated that reduced use of substances was a more appropriate measure of success. Evidence has shown that only a minority of people are abstinent at the end of treatment and that the proportion of people who are abstinent decreases over time after treatment. Using abstinence as the only measurement of success therefore ignores the fact that most people do have decrease substance use and experience improvement in other areas of functioning, and do in effect have a successful outcome.

In addition, it is also considered that while abstinence may be an appropriate long term goal of an adult who has had several years of substance use, it may be a less realistic goal for

adolescents, especially as it relates to alcohol use. The authors also noted that since substance use is typically associated with other problems in life related to school/work, legal, medical, social, family, psychological, it may be appropriate to also measure the impact on these other problems to determine success. This approach was taken in 29 of the studies reviewed and it is important because it is usually the impact of substance on these other areas of life, as opposed to the substance use itself that causes persons to seek treatment.

The major limitation of these studies, as noted by Williams et al, was that they report on the success of only those persons who completed the treatments and that there was no follow-up of persons who dropped out prematurely. Since in most cases they were a number of drop outs, the success of those who remain in treatment becomes negligible.

Poor follow- up rate is another problem that was cited. This is particularly critical in determining impact since it is acknowledged that adolescents who are difficult to contact for follow-up have a poorer outcome than those who are easy to reach. Only 48% of the studies had follow-up data and of these less than 75% of the participants were reached.

Another limitation observed in the studies is that of ascertaining substance use of adolescents. Many of the studies depend on self-reporting by adolescents to measure post treatment use of drugs and this might introduce some element of bias since it has been documented that underreporting is characteristic for the less socially accepted drugs such as cocaine, when parents are present, when answers are verbally given and also after treatment has been given as opposed to before treatment. Using parental reports to provide some corroboration for adolescent reporting was seen as an option for obtaining validation. However it was noted that this presents a problem since parents were not always aware of their children's drug use.

The review conducted by Williams et al indicated that several studies compared family therapy to other substance abuse treatments. Of these, Hennggeler et al. (1991) found that at 4 years post-treatment, family therapy produced significantly lower drug-related arrests compared to individual counseling for a group of conduct-disordered youth in Missouri, USA. Friedman (1989) found no difference in substance use at 9 months post-treatment between a group of adolescents receiving 6 months of outpatient family therapy versus a group whose parents enrolled in a 6-month parent support group.

Several recommendations were then posited by the authors to strengthen the weaknesses observed in the studies reviewed and to counteract the limitations. These recommendations included making treatment programmes more accessible and providing treatment to larger numbers of people. Employing procedures to minimize treatment dropout and to maximize treatment completion was also cited. It was further indicated that aftercare treatment should always be included in programmes to maximize its impact and improve its outcomes.

It was also suggested that since substance abuse has a wide range of social and psychological impacts, any treatment programmes should provide comprehensive services to include schooling, psychological, vocational, recreational, medical, family and legal components. Family therapy was also recommended be included as a separate component of treatment, and parent and peer support should be developed to support non-use of substances.

Theoretical Basis for Family-Based Approach

In an assessment of family-based approaches to substance abuse prevention Lochmand and van den Steenhoven (2002) state that epidemiological data has shown a steady increase in substance use as youth progress from 12 to 18 years, with retrospective reports indicating that the frequency and number of substances used increases over the period of adolescence. They also

asserted that while many youth discontinue drug use by late adolescence, the lowest non-continuation rates are with substances which have the highest rates and considerable associated comorbidity, including substances such as alcohol (9%), cigarettes (15%), cocaine (33%), and marijuana (17%) (Lochman & van den Steenhoven, 2002).

In an evaluation of comorbidity of outcomes Lochman and van den Steenhoven (2002) demonstrated that substance use tends to co-occur with a variety of adolescent problems behaviours, including youth violence, school failure and drop-out, depression, and teen parenthood and risky sexual practices. This was considered to be of particular concern for developmental psychopathology and for prevention of substance use and abuse. The authors found that these concomitant problems sharply accelerated in frequency from early to middle adolescence with delinquent behavior doubling in rate between ages 9 and 15, before beginning to decline around age 17. Similarly, alcohol and drug use increased rapidly from sixth to ninth grade, and then gradually increase throughout the late high school years in a similar pattern for both rural and non-rural children. A three-fold increase in depression, dramatic increase in affective disorder, increased sexual activity and accelerated pregnancy rates were also identified in youths between ages 10 and 15.

The characteristics of problem youth have been found to not only differ from their peers on just one dimension, such as aggressiveness, but instead vary on multiple behavioural dimensions related to poor self-control, leading to high correlation among delinquency, substance use and depression. This trend has been pointed out by the authors as being in keeping with problem behavior theory which states that deviance proneness would involve associations among a variety of adolescent problems behaviours including heavy drinking, marijuana use, delinquency and precocious sexual intercourse.

In the outcome studies conducted, adolescent substance users were classified into four categories ranging from non-users, minimal experimenters, late starters, and escalators (who have a steady increase in substance use from 12 to 18 years), the escalators have been shown to have had a history of family and peer problems which are typical for early starting antisocial youth. This classification suggests that preventive interventions would be more effective if they target children and early adolescents to address problem behaviours before they progress to serious comorbid conditions, combining substance abuse and mental health issues with antisocial and deviant behaviour.

Several risk factors, associated with interrelationships with family and peers, have been identified for substance abuse in children and adolescents. Some of these risk factors are also linked to childhood aggression and they include:

i. Deficient family management involving lack of maternal warmth, inconsistent parenting, unusually severe or permissive parenting, and poor monitoring and unclear expectations of behavior
ii. High levels of family conflict
iii. Low levels of warmth and involvement in parent-child relations
iv. Rejection by peers in elementary grades
v. Association with deviant peer groups who are composed of individuals who are aggressive and substance-users

These associated risk factors place substance use in a developmental framework, and coping behaviours are also important aspects of the developmental process. The authors established, through an assessment of available evidence, that family and parent factors exert a direct effect on adolescent substance abuse, and that in addition, these family factors exert an

indirect effect via their association with child aggression and antisocial behaviours, poor social competence and academic failure which are themselves associated with later adolescent substance abuse.

They also referenced research which suggests that harsh parenting, poor monitoring, and parental warmth are mediating factors which are often related to children's conduct problems and to adolescent substance use in complex ways. This set of mediating factors represents a core focus for most preventive parent intervention research programmes, including the Strengthening Families for Parents and Youth (SFPY) that is presented as an implementation project for this research paper.

Aggressive behavior on the part of children and adolescents has been found to be a result of harsh and restrictive physical punishment. Such punishment contributes to children's maladaptive information-processing in terms of poor cue encoding, hostile attributional biases, action-oriented solutions generation, and positive expectations for the effects of their aggressive behavior which then contribute to aggressive behavior, and risk for substance abuse.

Conversely, it was further noted that parental monitoring inhibits children's substance use and their association with drug-using peers, thus providing double protection. In recognition of the influence of these interactions, the developers of the SFPY programme included components to enhance parental monitoring and to strengthen the relationship between the child and their parents, with the perceived added benefit of lessening peer influence.

Positive parenting which combines warmth and authoritative parenting is also seen as a deterrent to drug use by youths. However, researchers also found that negative behavior on the part of adolescents have resulted in significant decreases in parents' positive reinforcing as well as small increases in negative parenting.

As a result early intervention is essential prevent deterioration in the level of parents' positive, supportive behavior. Reengaging levels of positive parent behaviours is therefore more critical when children begin manifest aggressive behavior. This is so since a negative response on the part of parents could drive to children to closer association with peers.

Overview of Family-Based Prevention Programmes

Family-based prevention programmes may be grouped into three broad categories which include universal, selective and indicated substance abuse prevention programmes. The first, universal preventive interventions are intended for all members of a general population while selective interventions are intended for higher risk population subgroups. The third group, indicated interventions are intended for members of populations that have been individually identified as being at high risk, and who show early signs of being on the trajectory towards substance abuse.

The majority of prevention programmes reviewed by were grouped into two different prevention approaches. The first, based on parent and family skills training, is designed to improve family communication skills, teach parent skills for nurturing and protecting their children, decrease children's antisocial, aggressive, or other problem behaviours and help children develop social skills. In this category parent training is usually provided to parents only, either in groups or individually and family skills training includes combination of parent-only training along with direct intervention sessions with the parent and children together. The second type of intervention, family therapy and In-home support, utilises interventions with less structured procedural manuals. This intervention involves all family members and not just the child and parent as in the case of parent and family skills training programmes.

The SFPY intervention is a hybrid of these two types which is directed at both the child and parents. Its aim is to improve family dynamics and it is implemented through a detailed curriculum-based programme, aimed at strengthening family interactions and placing responsibility on the parents for nurturing and protecting their children.

In their review of family-based interventions, Lochman and van den Steenhoven identified several gaps in knowledge about universal, selective and indicated programmes. They recognised that carefully developed parenting programmes directed at accepted risk factors for substance use, do have significant and substantial effects in improving parents' discipline efforts, and children behavior. From this observation it was deduced that behaviourally-based parenting programmes can play an essential role in reducing youth at risk for substance use. It was however noted that there were some gaps which future research may be directed at filling to further empirical understanding of the outcome effects of parent and family skills training.

Several issues were identified as having some bearing on the existing gaps, including attrition in prevention studies. Prevention studies, in comparison to treatment studies, were found to be particularly prone to attrition problems because the family and child are being approached by the 'preventionist' to participate in the research, rather than the family approaching the interventionist for help. The conclusion was made that better understanding of the factors that contribute to recruiting and retaining high risk children and their families in prevention interventions is necessary to improve prevention research.

Lochman and van den Steenhoven further indicated that some of the most carefully conducted studies examined possible differential attrition effects, but that the possible ways in which attrition can distort the understanding of intervention effects were rarely addressed. The authors noted that prior research on child-based interventions had suggested that length of

intervention and inclusion of booster programmes might help to produce stronger and more stable positive effects in children's behaviour. It was however not substantiated in the research whether booster sessions and longer-lasting programmes produced more lasting effects in parent interventions.

This issue of length of intervention was addressed by the developers of the SFPY programme. The original intervention, Strengthening Families Programme, was of 14 weeks duration. As a result of a research pilot project, the SFPY was reduced to nine weeks to maintain the interest of the adolescents. This process would be discussed in greater detail under the development of the programme.

Barriers to the implementation and dissemination of prevention programmes were also identified in the study. Barriers to widespread implementation of empirically-supported preventive interventions in community settings were found to be related to inadequate training processes; lack of acceptance on the part of community and social agencies; disinterest and resistance and lack of involvement by the potential participants. Perceived ownership of programmes by the community is therefore critical for the dissemination and ongoing implementation of family-based prevention programmes. This along with training and supervision of intervention providers is required for effective dissemination. Cultural appropriateness and cultural beliefs of the population that are in conflict with the intervention programmes' goals and methodology was identified as another barrier which may impact the recipient's ability to identify with the benefits of the intervention, and as a result make it ineffective.

Barriers to the success of family-based interventions are also created by different subtypes of individuals who are at risk and the varying effects which interventions are likely to

have on participants. The importance of understanding relevant subtypes of children and their parents and their influence on intervention effects was therefore stressed. This was in light of research which suggested that the anticipated relationships between poor parental monitoring and harsh parenting and children's aggression and conduct problems were not found in cases where children have certain types of temperament such as low activity levels or low fear, nor were they found in children depicting traits such as callous or unemotional behaviour,

Low levels of parent attendance at sessions and investment in the prevention programmes also represent a substantial barrier to effective dissemination of programmes. This issue is the greatest impediment to producing effective dissemination of programmes since parents of high risk children may not attend any parent training sessions when invited, or if they do come, their attendance may be highly sporadic. This barrier is found to be unique to prevention programmes where parents are proactively sought out to participate in learning new skills to counteract the development of problems in their children.

In comparison, for treatment services, parents are found to be actively and personally involved in the process of seeking services for their children. In their recommendations for future research and policy development, Lochman and van den Steenhoven stressed the need for prevention programmes to be promoted by stakeholders, and for the success of empirically-supported, early-prevention initiatives to be advocated. They advanced the view that research findings indicating the effectiveness of preventive interventions should be incorporated into policy agendas to bring about more proactive, constructive efforts to carefully and systematically implement proven family-based preventive programmes.

The review of studies thus far has indicated that ideally, family-based prevention interventions should be provided in early childhood and at key developmental transitions, using

developmentally appropriate interventions. This would involve a comprehensive community approach that would target young children with prevention services and follow through with more targeted services for high risk individuals throughout their child and adolescent years.

More focused intervention services would be required during specific periods of increased risk for youth such as during school transitions. Focused intervention programmes are best suited to impact moderate risk individuals, youth who are 'late starters' and have sharply escalating problems in adolescence, and the general population youth who are experiencing the normative stressful events. The more generalized community-based early preventative programme may begin with structured, highly standardized programming, and then progress to a more individualized intervention as youth become more heterogeneous in their functioning and development.

Ongoing support after the delivery of preventive intervention programmes for parents need to be put in place to activate access to relevant community resources by families. This has been cited as an overlooked aspect of intervention development which needs to be provided to guarantee continuing access to support services after the programme has ended. Finally, the observation that preventive interventions that have both parent and child components are more effective in addressing a broader set of risk and protective factors than can intervention with single components, is demonstrated in the Strengthening Families Programme (SFP) and the adapted SFPY progarnmme. These programmes are comprehensive, multicomponent interventions that have been shown to have potential for good outcomes for high risk children and adolescents who are already exhibiting behavioural problems.

Further review of family-based therapy was cited by Ozechowski and Liddle (2000) who described it as one of the most thoroughly studied treatments modalities for adolescent drug

abuse. They concluded that clinical reviews of adolescent drug abuse treatment approaches have acknowledged family-based therapy as a core intervention modality.

This assessment strengthens previous reviews of the empirical literature on family-based therapy for adolescent drug abuse by evaluating existing research on core criteria in contemporary intervention science. It was indicated that guidelines and blueprints for treatment development research which have been articulated within the psychotherapy research literature do have some relevance to the development of family-based therapy for substance abuse prevention and treatment. The authors noted that the approaches were not identical, but when taken together, contributed a framework through which articulated standards and criteria for conducting programmatic research would be established. Such a framework would include the components, processes, mechanisms, and boundaries of effective treatments for well-defined clinical problems and patient populations.

Given this perspective, Ozechowski and Liddle conducted research to highlight the knowns and unknowns about the empirically supported family-based treatment development progress, including areas that have been understudied. Based on these findings the authors described the major theories underpinning family-based therapy for adolescent drug abuse and recommended methods to achieve greater impact in intervention outcomes.

Family Systems Theory

The first of these theories, family systems theory, is described by Ozechowski and Liddle as a conceptual cornerstone of all family-based treatments for adolescent drug abuse. Its emphasis on relational and the contextual nature of human behavior is seen as the most enduring and influential aspect of this theoretical system. From the family system perspective, individual

functioning is considered to be reciprocally interconnected to that of other individuals within one's primary relational context, the family.

This systematic approach clearly demonstrates the delineation of the recurring patterns and interactional sequences of interaction in which problems, such as drug abuse, are embedded. Accordingly, a family systems view of adolescent drug abuse focuses on the manner in which adolescent functioning is related to parental, sibling, and extended family functioning, as well as to patterns of communication and interaction within and between various family subsystems including parent-adolescent, parent-parent and parent-sibling subsystems. A family systems orientation specifically considers the manner in which levels of emotional connection and separation, harmony, and conflict among family members is maintained by adolescent drug abuse and related problem behaviours.

Structural-Strategic Family Therapy

Structural-strategic family therapy determines that clinical intervention should orchestrate emotional and cognitive change within individuals and interactional changes between family members. It was found that intervention strategies and techniques derived from the "structural-strategic" family therapy orientation have been particularly prominent within family-based therapy for adolescent drug abuse. Structural-strategic family therapy is posited on the restructuring and reorganization of family functioning through in-session 'enactment'.

Enactments are therapist-directed interactions among family members during the session. These interventions assess current family processes and relational dynamics and create new ways of interacting among family members. Out of these interventions techniques are employed to establish normative shifts in lines of authority, communication, and emotional connection within families of adolescents drug abusers. This methodology is based on the hypothesis that

improvements in family functioning are related to improvements in functioning of the individual teenager, and that such improvements decrease the likelihood of drug taking and other forms of problem behavior.

Cognitive Behaviour Theory

Family therapy models have also integrated traditional family systems theory with principles and techniques of individual cognitive-behavioural therapy and tested for adolescent drug abuse treatment. Behaviour family-based theory approach view adolescent drug abuse as a conditioned behavior that is reinforced by cues and contingencies within the family. For example, the drug abuse may be modeled and reinforced by other family members or it may be tacitly reinforced by parents' approval of adolescent association with drug-using peers, or by parents' permissive response to initial use by adolescents. Drug use may also be stimulated by high levels of stress and conflict in the family.

Intervention in behavioural family therapy is concerned with diminishing conditions and behaviours within the family that are compatible with drug use and, at the same time reinforcing those conditions that are incompatible with drug use. To achieve this, techniques such as modeling and rehearsal of skills in family communication, improving parents' behaviour management and discipline practices; and implementing positive rewards for adolescents' non-drug use behavior are employed.

Social Ecological and Developmental Theory

This theory expands the boundaries of clinical intervention for adolescent drug abuse treatments beyond the family and also represents a paradigm shift in treatment and prevention models. Examples of empirically supported treatment in this category are multisystemic therapy and multidimensional family therapy. In this 'advanced' model, which also integrates the classic

family systems theory, individual behavior is considered within a nexus of interconnected and nested social systems including the individual, family, school, peer, neighborhood, community and culture.

This multi-faceted approach toward adolescent drug abuse treatment is in alignment with studies and research that have identified an interconnected network of risk and protective factors for drug abuse that spans the multiple ecological systems in which teens live. Given this interrelationship, multiple risk factors are understood to act independently and in combination to compromise normal adolescent development, and as a result give rise to symptoms of drug abuse, delinquency and other behaviour problems. These models in turn attempt to address several interconnected factors and implement intervention strategies that are individualized, broad-based, and comprehensive in nature.

Social ecological and developmental theory depends on a dynamic evaluation of risk and protective factors within individual, familial, and extrafamilial systems. In this model functional areas that have been empirically established as correlates of adolescent drug and behavior problems are assessed. Interventions are then tailored to each adolescent's and family's unique developmental risk and protection profile, and within the most appropriate setting from the adolescent's perspective which may be in the home, school, or other appropriate setting rather than in the therapist's office.

Typically interventions based on this theory are more frequent and intensive than the more traditional approaches. Each case is managed by two or more therapists or a primary clinician and therapist assistant, and may involve sessions with any of the adolescents' networks including teachers, probation officers, family, and peers. This is based on the underlying clinical hypothesis that adolescent drug abuse and problem behaviours will decrease significantly when

therapists work closely with the adolescent, his or her family, and significant members of other ecological systems to construct and implement personally meaningful, practical, and developmentally positive lifestyle changes.

The review by Ozechowski and Liddle demonstrated that adolescent drug use tends to occur along with one or more problem behaviours or symptoms such as delinquency, aggressiveness and antisocial behavior. Given the interrelatedness of drug and behavior problems, family and multiple systems-oriented adolescent drug abuse therapies have been designed to target adolescent drug abuse along with these other problem behaviours. In each of the 10 clinical trials reviewed by the authors in the family-based therapy category, all were found to be effective in reducing problem behavior associated with adolescent drug abuse.

While the effects of family-based therapies were found to be equivalent to those of alternative treatments in reducing problem behavior from pre-treatment up to 6-12 months post-treatment in half of these studies, evidence from 3 studies showed that behavior problems other than drug use may decrease more in family-based therapy than in alternative treatments. This further strengthens the efficacy of family-based therapies for adolescent drug abuse.

Family-based therapy was found to be effective in addressing a number of other problems in addition to substance abuse. These included medically related problems as well as social behavioural problems. Family-based therapy was also found to be effective in decreasing psychiatric symptoms among adolescent drug abusers in each of the five studies that formally assessed changes in psychiatric symptoms. This is an important finding since adolescent drug abuse is usually commonly accompanied by psychiatric disorders such as conduct disorder, attention-deficit hyperactivity disorder, anxiety disorder, and depression. The need for

comprehensive treatment interventions to address comorbid psychiatric conditions in addition to substance abuse is therefore critical to achieve the overall desired impact.

Evidence from studies reviewed also indicated that there is a direct correlation between school performance and drug abuse among adolescents. Strong involvement in school is shown to act as a protective factor against substance use and abuse by children and adolescents. Family-based therapies have included outcomes related to enhanced school bonding and academic performance and as a result teachers and other personnel have often been directly involved in ecologically oriented family-based interventions for adolescent drug abuse. The authors noted that these findings provided the first evidence of the efficacy of family-based therapy in improving drug-abusing adolescents' involvement in school, and indicated that further research was needed to replicate these findings. This would be necessary to identify the types of interventions that lead to improved school attendance and performance and the mechanisms by which these changes occur.

These findings and recommendations for further research are particularly applicable to the SFPY pilot project being presented in this paper. The participants of two pilot projects would have all presented in the school environment with drug abuse problems and/or behavioural and performance problems in the classroom. The majority of the participants would have been temporarily suspended from school, or would have been referred to a temporary placement in an alternative learning centre for children with behavioural problems. The importance of addressing substance abuse problems in conjunction with school performance and behavioural problems is therefore justified.

Family functioning has also been identified in the research as a primary mechanism of change in family-based therapies for adolescent drug abuse. A fundamental premise in family-

based interventions is that improvements in core dimensions of family functioning such as communication, cohesion, conflict and parenting practices) are mechanisms employed to reduce drug use and other behavioural problems in youths. The SFPY intervention was developed to improve parenting skills and to facilitate functional family relationships and cohesion in line with this fundamental principle. There was some assessment of the status of family functioning at the end of the intervention, but in order to test the true impact, pre-intervention assessments would need to be conducted.

Findings in all the studies in this category reviewed by Ozechowski and Liddle suggested that family-based interventions can improve family functioning among adolescent drug abusers. In five of the seven clinical trials, family-based therapy was found to be as equally effective as alternative treatments in improving family functioning, while two clinical trials found it to be superior to alternative treatments in improving family functioning. The findings also provide preliminary support for the hypothesis that improvements in family functioning, specifically in parenting behavior, may be a mechanism of change in adolescent drug use and behavior problems in family-based therapy.

The authors noted that high rates of risky sexual activity, including sex with multiple partners and unprotected sexual activity, are common among adolescent drug abusers. In addition to the clinical outcomes discussed previously, sexual activity and sexual relationships should therefore be an important focus for adolescent drug abuse treatments. It was noted however that none of the studies reviewed by Ozechowski and Liddle provided any information on this issue and very limited data exist on the impact of any form of drug abuse treatment on adolescent sexual activity. One exception provided was a 1999 study by Jainhill, Yagelka, Hawke, and De Leon which demonstrated significant reductions from pre-treatment to 1 year

post-treatment in some aspects of high-risk sexual activity among both males and females following residential treatment for adolescent drug abuse.

The conclusion was drawn that there was uncertainty as to whether family-based therapy could target and demonstrate positive effects on risky sexual behavior among drug abusing teens. It was noted however that opportunity did exist to examine this impact since many of the targets of interventions are likely to include the kind of attitudes towards sex that would diminish risky sexual behavior. Such targets include parent-adolescent connectedness, open communication between parents and adolescents about sex and adolescent involvement in school. The Strengthening Families Programme does address targets related to positive communication and relationship building between parents and their youths but does not specifically target attitudes towards sex and risky sexual behavior.

With regard to association between drug use and delinquent peers, evidence has shown that there is a definite influence of drug abusing peers on adolescents and this influence may be stronger than family relationships in predicting the trajectory of drug use during certain stages of adolescents. In addition it has also been established that peer effects mediate the relationship between family variables and adolescent drug use, and that association with drug abusing peers is a critical factor in relapse following adolescent substance abuse treatment. Family-based therapies attempt to impact peer relationships in a number of ways by increasing parental monitoring to reduce adolescent's exposure to vulnerability to drug abusing peers and by improving parent-adolescent attachment and relationship quality. Attempts are also made to strengthen adolescents' connection to prosocial institutions such as school, church, sports teams and community youth organizations with the view of establishing ties with positive adult role models and relationships with prosocial peers.

There was no direct behavioural assessment of peer relationships observed in the studies, but there is indirect evidence that family-based therapy reduces adolescents' involvement with drug using and delinquent peers. Diminished externalizing and delinquent behavior problems in family-based therapy suggest a reduction in adolescents' affiliation with negative peers. Likewise, connection to normative peers may strengthen family-based therapy by virtue of increased attendance and performance in school. None of the studies reviewed provided direct assessments of the impact of peers on adolescent substance use, but the authors noted that there were instruments available to empirically determine impact in the future.

Sustaining long term effects of family-based therapy is a primary concern of interventionists. Patterns of adolescent drug abuse continue in most cases into young adulthood and beyond requiring interventions that have the capacity to interrupt the projected path of drug abuse. A number of the studies reviewed demonstrated sustained effects of family-based therapy 6 to 12 months post-treatment. The reviewers however stressed that there was still need to learn about the long-term sustainability of treatment outcomes in family-based therapy for adolescent drug abuse. In addition, the question of whether follow-up or booster sessions improve the long-term durability of treatment outcomes was also raised along with the types of environmental and contextual correlates that determine long-term post-treatment success and relapse.

Clinical Significance of Treatment Effects

The clinical significance of treatment effects was another factor that was examined in the literature and it was determined by Ozechowski and Liddle that considerable attention had been paid to establishing the clinical significance of changes occurring as a result of treatment. Accepted criteria for clinically significant change were looked at and these included qualitative

shift in the functioning of individuals such as change from chronic to mild drug use and improvement in areas of social impact such as lower crime or reduced truancy.

The studies reviewed verified clinically significant changes for both types of treatment effects. Greater decreased level of drug use was reported in Multidimentioal Family Therapy (MDFT) compared to adolescent group therapy and family drug education. With regard to social impact of changes in adolescent symptoms, it was reported that the percentage of youth in MDFT who had at least a C grade point average increased by 43% from intake to 12 months post-treatment compared to increases of 17% in adolescent group therapy and 8% in family drug education.

It was determined however that more work was needed to develop criteria for classifying reductions in adolescent drug use from clinical levels to nonclinical or normative levels. This is in keeping with the harm reduction model of adolescent substance abuse treatment where levels of drug use are viewed on a continuum ranging from excess to moderation to abstinence. In this model any step towards abstinence is considered to be a positive outcome, and is considered to be more realistic and developmentally appropriate treatment objective than abstinence for adolescent substance abusers.

Indication of clinically significant change in adolescent drug use may then be measured by indices for adaptive functioning, including school attendance, improved grades and participating in extracurricular activities. Reduction in symptoms of drug use comorbidity, and behavior problems could be considered to be clinically significant to the extent that they are accompanied by improvements in areas of adolescent daily functioning.

Treatment cost or the cost effectiveness of family-based therapy for adolescent drug abuse was only examined in two of the studies that were reviewed by Ozechowski and Liddle.

One of the studies by Schoenwald, Ward, Henggeler, Pickrel, and Patel (1996) found that the costs of providing family-based therapy were approximately 50% higher than the costs of providing treatment as usual. However, during the year following treatment, youth who received family-based therapy incurred 46% fewer days of incarceration and 64% fewer days of inpatient psychiatric care or residential treatment than youth in the alternative treatment. It was deduced that over time, the continued cost savings resulting from lower rates of post-treatment institutionalized placements would offset the direct costs of providing family-based therapy.

Family-Based Therapy: Summary

A considerable amount of knowledge is now available on family-based therapy for adolescent drug abuse. Family-based therapy is now established as a safe, acceptable, viable, and promising treatment for adolescent drug problems. Family-based treatments have evolved considerably since the early 1980s, and have progressed from concentration on integrative combinations of structural and strategic family therapies to focus primarily on the family as a unit of intervention. Models then progressed to interventions 'beyond family therapy' to include social ecological family-based therapy that have extended the scope of adolescent drug abuse treatment to include the interrelated environmental systems with which the adolescent interact on a daily basis.

The expanded scope of family-based therapy is said to be neither accidental nor random, but rather based on clinical, theoretical and empirical underpinnings. In response to recommendations made over time, there is now a growing volume of relevant studies that are research-based and easily accessible. Basic research on adolescent drug abuse has now progressed into clinical interventions that have played an important role in the development of family-based substance abuse therapy for adolescents.

The major outcome of research over time is the advancement in the provision of tested treatments with treatment manuals that specify theory-based and principle-driven procedures of family and multiple systems-oriented interventions at high levels of detail. The manuals facilitate the dissemination and replication of family-based therapies in various adolescent treatment and research settings. The Strengthening Families Programme for Parents and Youths piloted in this project was facilitated through one such programme manual.

EMPIRICAL RESEARCH ON THE STRENGTHENING FAMILIES PROGRAMME

Studies conducted on the Strengthening Families Programme, the intervention on which the Strengthening Families Programme for Parents and Youth is based, provides substantial empirical support for family-based intervention models to address substance abuse within the children and adolescent population. The most significant of these are two studies by Spoth et al (2001; 2004) that examined the long-term substance use outcomes of two brief interventions designed for general population families of young adolescents, and provided adolescent substance use outcomes at 4 years following baseline and at 6 years following baseline respectively.

For the initial intervention, thirty-three public schools were randomly assigned to 3 conditions: the 5-session Preparing for the Drug Free Years Program, the 7-session Iowa Strengthening Families Program, and a minimal contact control condition. The pretest involved 667 6th graders and their families. Assessments included multiple measures of initiation and current use of alcohol, tobacco, and marijuana. Pretest data were collected in the 6th grade and the reported follow-up data were collected in the 10th grade. Significant intervention-control differences in initiation and current use were found for both interventions. It was concluded that

brief family skills-training interventions designed for general populations have the potential to reduce adolescent substance use and thus have important public health implications.

Epidemiological research also provided several indications of the critically important need to address the early initial use of substances among adolescents. A key indication is the increased probability of costly substance dependence in adolescence and young adulthood associated with early initiation. Spoth et al referred to the National Longitudinal Epidemiological Survey of a 27,616 population sample which showed that lifetime dependence rates of those who initiate alcohol use by age 14 are four times as high as those who start at age 20. The study further demonstrated that the odds of lifetime dependence decreased by 14% with each additional year of delayed initiation, after adjusting for potentially confounding variables. These findings substantiated other epidemiological studies which had previously shown that early initiation of alcohol and other substances predicted substance-related problems in later adolescents and adulthood. The authors concluded that substance related problems incur staggering costs associated with lost productivity, healthcare expenditure and increased crime rate. This was based on the 1995 economic cost of alcohol and other substance abuse in the United States, estimated to be 276 billion dollars (Spoth et al 2001).

Spoth et al agreed with the earlier assertion by Ozechowski and Liddle (2000) that empirically supported family-focused interventions have the potential to make significant contribution to reducing costly public health and social problems associated with youth substance use. They emphasized that a review of research studies has suggested that brief, family-focused preventive interventions can be effective in the reduction of substance abuse when they follow scientific principles of prevention. The prerequisite for effectiveness is that interventions must be theory-based and that they must address well established risk and

protective factors originating in the family. Spoth et al further indicated that epidemiological study of the influence of these factors originating in the family demonstrate risk reduction and protection enhancement. They cited the example of a national study of over 12,000 general population adolescents (Renwick et al., 1997) which showed that "child-family connectedness" figured prominently in adolescent alcohol outcomes. The authors reported that in that study, family context factors accounted more fully for the frequency of alcohol use among seventh and eighth graders than either school context or individual factors.

In addition to being theoretically sound and based on empirical evidence, Spoth et al emphasized that it was equally important for general population family interventions to be developmentally well-timed. The intent of the intervention tested in their study was to address young adolescent risk and protective factors during the critical developmental stage of transition into middle adolescents, when young persons typically have a greater opportunity to engage in deviant behavior.

To strengthen the effects of the tested interventions they were offered at a point (first semester, sixth grade) when most students in the sample were more likely to begin experimentation with substance use that is associated with young adolescent exploration and rebellion, substance use opportunities, or peer encouragement to use. This timing was important because it occurred after the opportunity for use but before the adolescents were likely to have progressed to more frequent and more varied use. By targeting this developmental stage, the interventions were designed to enhance youths' ability to meet substance-related challenges in transitioning to middle adolescence.

In addition, both interventions taught skills that reduced risk and increased protective factors through research-based interactive skills training techniques conveyed through modeling,

behavioural rehearsal, feedback and home practice. Finally strategies to ensure both active engagement of the families and quality implementation of the intervention components were used. For example, implementation strategies were refined with guidance from consumer-research studies on family engagement factors, such as preferred scheduling options. Procedures were also used to ensure that implementation was consistent with intervention manuals, including placing essential content on videotape.

It was noted that previous literature reviews had suggested that general population family interventions rarely followed these principles to enhance efficacy and that credible evidence of efficacy was even rarer. This was in response to the observation that few of the interventions had been rigorously evaluated, despite a large number being developed and disseminated. Further, it was stated that although a number of randomized controlled studies of school and community-based interventions did incorporate family intervention components, the effects of the family components could not be readily disentangled from those of other intervention components because the study designs were intended to yield results concerning the comprehensive intervention.

This was because the family components were not free standing or independently tested. A literature review by the authors failed to reveal any longitudinal, randomized controlled studies of freestanding family-focused interventions for general populations. Additionally, among studies of general population preventive interventions, a number of methodological deficits are frequently observed, including a lack of randomized controlled designs with representative samples, interventions that were not grounded in relevant theoretical or empirical literature; failure to assess the fidelity of intervention implementation; lack of consideration of assumptions of statistical models; and no long-term follow-up.

This first study by Spoth et al (2001) was therefore designed to address both the substantive and methodological gaps in the literature described above. It reports longitudinal outcomes of a randomized, controlled trial evaluating two theory-based, family-focused interventions for general populations, Preparing for the Drug Free Years (PDFY) and the Iowa Strengthening Families Program (ISFP). Earlier work by the authors, including reports on an earlier controlled outcome study, focused on short-term parenting or parent-child interactional outcomes.

They also focused on models of family processes influencing shorter term young adolescent outcomes, particularly alcohol refusal skills and propensity to use alcohol. Earlier 7th and 8th grade follow-up data from the current study were used to examine transition probabilities of a latent substance-use variable and ISFP effects on reported frequencies of alcohol use. The study therefore extends prior work on evaluation of family intervention outcomes by examining intervention effects on initiation and current use of substances at 10th grade follow-up or 4 years following baseline.

Spoth et al examined intervention versus control differences in initiation levels of alcohol, tobacco, and marijuana use. They also evaluated effects on several indicators of current use. The specific hypotheses tested were: Tenth-grade adolescents in intervention-group families will demonstrate (a) delayed initiation of alcohol, tobacco, and marijuana use, and (b) lower levels of current use, including frequency of use, relative to those in the control group. Because the ISFP and PDFY program evaluations were separately funded by two different agencies, there were no intervention comparison hypotheses in the study proposals. Thus, only supplemental analyses testing for differences in outcomes across the two interventions are reported. A description of the research methodology employed by the authors will now be presented.

Methodology of the Study

Participants in the study were families of sixth graders (comparable to first formers in Barbados at the start of secondary school) enrolled in 33 rural schools in 19 contiguous counties in a Midwestern state. Schools were selected on the basis of school lunch programme eligibility (15% or more of district families eligible for free or reduced-cost lunches) and community size (populations of 8,500 or fewer). A randomized block design guided the assignment of the 33 schools. Schools were blocked on the proportion of students who resided in lower income households and on school size. Within blocks, each school was randomly assigned to one of each experimental condition: the seven-session ISFP, the five-session PDFY, or a minimal-contact control condition.

All families of sixth graders in participating schools were recruited for participation. Of the 1,309 eligible families recruited, 667 (51%) completed pretesting (238 ISFP group families, 221 PDFY group families, and 208 control group families). The authors noted that prior literature on prevention trial recruitment rates indicate that this compared favourably with, or exceeded, those commonly reported for prevention trials addressing child problem behaviours with similar evaluation components at the time this trial was undertaken. At the time of pretesting, participants did not know the experimental group to which their school was being assigned, although they had been informed that the project included an intervention component in some schools. Refusal rates were similar for the 3 groups.

Sample Quality: Representatives, Preset Equivalence, and Attrition

Pretest equivalence of the intervention (both PDFY and ISFP) and control groups was assessed. Family socio demographic characteristics (household income; parent education; parent age; target child age; target child gender; parent marital status; number of children in the

household) were examined. School and community characteristics (e.g. school enrollment, number of classrooms, student achievement ranks, student attendance, school lunch programme eligibility rates and community population) also were assessed. Pretest equivalence across the intervention and control groups was established and there were no reported significant PDFY-control or ISFP-control differences for any of the variables examined.

In addition, pretest equivalence on all outcome measures was assessed and was ascertained for all but one measure. Tobacco initiation scores at pretest for PDFY students were higher than they were for control condition students; pretest differences for all outcomes (significant or not) were controlled in all analyses of intervention effects.

Intervention Implementation and Fidelity

Parents and children participating in both interventions were instructed in skills demonstrated to be associated with the delayed onset or reduction of substance abuse. The design of the PDFY was informed by the social development model, which integrated social control theory and social learning theory. Guided by social control theory, the social development model posits bonding to prosocial others as a key protective factor that diminishes the likelihood of adolescent substance use and other problem behaviours. The social learning theory component specifies processes predicting conditions under which bonding to prosocial others develop. The primary focus of prosocial bonding is the family and bonding with school and prosocial peers is facilitated by the family.

Three primary change goals were targeted by PDFY to develop prosocial family bonding: increasing the frequency of opportunities for prosocial involvement in the family; strengthening the child's skills for prosocial involvement through participation in family activities and

governance; and increasing recognitions and rewards for child behaviours that conform to family rules and expectations, as well as application of appropriate consequences for violations.

Towards this end, PDFY emphasized parent or parent-child skills training in five areas:

1. Creating opportunities for, and rewarding of, positive family involvement and interaction
2. Effective child management, including establishment of child expectations, careful monitoring, and appropriate discipline
3. Establishing mechanisms for parent instruction and assistance with training peer resistance and other child skills
4. Reducing and appropriately managing family conflict
5. Expressing positive feelings to enhance bonding

Preparing for the Drug Free Years (PDFY): Delivery

PDFY was delivered in 5 weekly training sessions, each of approximately 2 hours duration. Classes were held on weekday evenings, typically at schools. Four of the sessions were attended by parents only; while children attend one session with their parents, focusing on peer resistant skills.

Iowa Strengthening Families Program (ISFP): Design

ISPF is based on the biopsychosocial model and other empirically based family risk and protective factor models. These include the resiliency model and the social ecology model of adolescent substance use. These models articulate categories of empirically based risk and protective factors that influence substance use and other problem behaviours. Targeted risk factors include poor discipline skills and poor quality of parent-child relationships. Protective factors targeted by ISFP focused on resiliency characteristics in youth, including empathy, as

well as parent-child bonding. Resilience-related characteristics in youth are hypothesized to reduce substance use and other problem behavior through their positive influence on youth coping skills.

Iowa Strengthening Families Program (ISFP): Delivery

The ISFP consisted of seven sets of sessions conducted once per week for seven consecutive weeks and like PDFY, sessions were held on weekday evenings, typically at schools. ISFP included separate parent and child skills-building curricula and a family curriculum. Weekly sessions consist of separate, concurrent training sessions for parents and children, followed by a family session in which parents and children jointly participate. During the family session, parents and children practiced skills learnt in their separate sessions. The concurrent parent and child sessions lasted one hour and were followed by the family session which also lasted one hour. The seventh session consisted of a 1-hour family interaction without the concurrent training interaction for children and parents. There were a total of 13 sessions. Twenty-one 3-person leader teams conducted 21 ISFP groups in the 11 participating schools. A total of 161 families participated in the 21 groups, including 117 families who had completed the in-home pre-test assessment. Group size ranged from 3 to 15 families; with an average size of 8 families and an average of 20 individuals attended weekly session.

Control Group

Families participating in the control group were mailed four leaflets describing different aspects of adolescent development (e.g. physical and emotional changes, as well as parent-child relationships) during the time period in which families in the other two experimental groups were participating in the interventions.

Results

The proportion of PDFY and ISFP adolescents reporting initiation of each of the five substance-use behaviours since pre testing (new user proportions) were compared with those in the control condition using z tests. At the tenth grade follow-up, results indicated that new user proportion were significantly lower for ISFP condition adolescents than for control group adolescents for all five behaviours. The new user proportions were also lower among the PDFY adolescents than the control condition adolescents for each of the five behaviours:

1. Ever drank alcohol
2. Ever drank without parent permission
3. Ever been drunk
4. Ever smoked cigarettes
5. Ever use marijuana

Relative reduction rates of new user proportions were calculated to provide an indication of the practical significance of the findings, by comparing the intervention group prevalence with that of the control group. Relative reduction rates for drunkenness and marijuana use were especially noteworthy. For persons assigned to the relatively less intensive PDFY, 10^{th}-grade follow-up rates were 19% and 37% respectively. For ISFP adolescents relative reduction rates were 40% and 56% respectively.

This study examined long-term substance use outcomes of two brief interventions designed for general population families of young adolescents. Findings showed evidence of intervention-control differences in delayed initiation, current use, and composite use, at a point when students were in high-risk years for substance-related problem behaviours. Significant effects detectable four years past baseline were observed for both interventions, with a greater

number of significant effects found for the relatively more intensive ISFP. Although the tested interventions were of short duration, their positive effects were consistent with designs that follow research-based principles. They were implemented as universal family-focused interventions which utilized a representative sample of a targeted population. The interventions were based on theoretical principles and incorporated risk and protective factors originating in the family.

In addition, close attention was paid to strategies for actively engaging participating families. Interactive skills-training methods were used and were implemented with high fidelity. The interventions were also implemented at the developmental point at which the participating students were likely to be experimenting with alcohol or tobacco, but before they progress to more varied use of substances. This combination of these factors were considered to be responsible for the long-term effects observed at the four and six-year follow-up and also added credibility to the outcomes.

The authors noted that the positive outcomes in earlier studies and in their work suggested the possibility of a positive diffusion effect within intervention communities and schools. Diffusion effect is achieved through the creation of a social environment through which intervention effects may diffuse in the study's communities and schools by way of intervention parent and youth contact with their nonintervention peers. It was noted that although there was no evidence yet to support this effect, a number of factors support the speculation, including the premise that the interventions tested were designed to prevent the initiation of substance-use behaviours rather than to extinguish behaviours already established.

Results suggest that the interventions may have their strongest effect on initiation and current use of alcohol, referred to as the substance of choice among adolescents in the USA. Key

alcohol-related outcomes included significantly lower past month alcohol use, lower frequency of alcohol use among adolescents, and lower alcohol index scores in both the PDFY and ISFP conditions at the 10th-grade follow-up assessment, as well as significantly lower proportions of 10th-grade adolescents in the ISFP condition reporting lifetime use of alcohol. Positive results from analyses of ISFP intervention effects on peer and parent relations are consistent with the idea that ISFP influences on child substance abuse operate through both child and parent skills targeted by the intervention.

Public Health Significance

From a public health perspective, the results of this study are significant. First the epidemiological research cited clearly demonstrated high prevalence rates of alcohol, tobacco, and marijuana use among young adolescents. Secondly, the epidemiological studies provided clear empirical indicators of public health benefits of delayed initiation and progressed substance use among adolescents. Thirdly, brief interventions such as the ISFP and the PDFY are readily implemented in a number of settings such as schools, community and health centres. Further, research suggests that family and skills-training interventions can be cost-effective and cost-beneficial is consistent with the promotion of sustained community intervention.

The clinical significance of the findings resulting from the interventions is also noteworthy from a public health perspective. The authors noted that recent calls for clinical intervention researchers to pay increased attention to the degree to which intervention-induced change is of sufficient magnitude to return participants outside of the normal range on an outcome variable to within normal range is similar to a parallel call for universal prevention intervention researchers to report on measures of magnitude of change from a public health perspective. In the case of drunkenness for example, the relative reduction rate of 40% indicates

that the rate of drunkenness onset was 40% greater in the control group than the ISFP intervention group over the course of the study. This rate suggests that for every 100 normal or general population adolescents initiating drunkenness, only 60 intervention group adolescents will likely initiate the behavior over the same period.

The follow-up study by Spoth et al (2004) conducted six years following baseline further strengthened the potential public health benefits of the interventions. The authors indicated that the consequences of initiation and early substance use suggest a number of public health and other societal benefits of broad diffusion of interventions designed to delay initiation and transition to more serious types of use. It was reinforced that universal family-focused interventions had the capacity to provide these benefits. The capacity is related to the conditions under which such interventions can be expected to produce positive results including the use of theory-based intervention, addressing established risk and protective factors; appropriate developmental timing; application of empirically supported skills-training techniques, and effective strategies for engaging families.

These assumptions were based on the outcome of the first study which showed positive results on family factors associated with delayed substance initiation and progression. These factors included parenting behaviours, child management, parent-child affective quality, as well as young adolescent use and progression in use. Both interventions, PDFY and ISFP, had resulted in positive outcomes with reduced initiation and use of alcohol sustained through a follow-up 2.5 years past baseline and four years past baseline.

The second analysis represents the longest ongoing longitudinal study which has produced substantial substance use data collected at 6 years past baseline. The original baseline was established through interventions randomly assigned to schools as opposed to individuals.

This second study was based on the hypothesis that adolescents in PDFY and ISFP intervention-group schools will demonstrate slower growth in initiation of alcohol, tobacco, and marijuana from the 6th to the 12th grades than will adolescents in control group schools.

Significant condition differences in the rates of growth for three of the seven substance use outcomes were observed between the ISFP and control groups. Adolescents in the ISFP group showed a slower overall growth in lifetime use of alcohol, lifetime cigarette use, and lifetime use of marijuana. The other four substance use indexes were alcohol use composite index, tobacco use composite index, lifetime use of alcohol without parental permission and lifetime drunkenness. In addition, a significant pretest difference was observed for lifetime use of alcohol without parental permission.

The authors of this study suggested that both family-focused interventions slowed the growth of initiation of some substances over a six-year period following the baseline assessment, during which the mean age of participants increased form 11.8 years to 18.2 years. They also noted that these outcomes were observed in analyses conducted at the school level, as opposed to the individual level. Further, a greater number of delayed growth effects were in evidence for the ISFP, with PDFY effects shown only on tobacco use growth rates. The results from this study are important since they provide significant findings on the long-term outcomes of universal family-focused interventions. It also has implications for the potential public health benefits of diffusion of efficacious universal family-focused interventions in the general population.

The authors further highlighted the practical relevance of the findings in demonstrating the degree to which the preventive interventions improved participants' status relative to the "normal" population represented by the control group sample. One example related to onset of

drinking without parental permission. It was calculated that 40% of the control group participants had initiated drinking without parental permission at 14.7 years of age. At the same age the ISFP group had shown an initiation rate of 18%, for a relative reduction rate of 55%. The rate suggested that for every 100 normal or general-population adolescents who had initiated use by that age, only 45 intervention group adolescents were likely have initiated the same behavior by that age.

In addition to the preventative benefits, economic benefits were also shown through benefit-cost analyses. The authors surmised that the delayed initiation of alcohol use observed when the ISFP-intervention participants were in the sixth to tenth grades resulted in a return of $9.60 per $1.00 invested, concerning the avoidance of alcohol-use disorders alone. This has significant economic implications for implementing family-based interventions, particularly with the increasing rate of substance abuse among adolescents and the projected health and social impact. This impact is much more relevant when drug use in children and adolescents is examined from a national perspective.

NATIONAL OVERVIEW OF DRUG USE IN CHILDREN AND ADOLESCENTS

The studies cited earlier, though comprehensive in empirical methodology for assessing the efficacy of family-based interventions for substance abuse, do not provide a national overview of drug use in the child and adolescence population. Such an overview is now available through the Results of the National Comorbidity Survey on Use and Abuse of Alcohol and Illicit Drugs in US Adolescents **(**Swendsen et al, 2012). A cross-sectional survey of adolescents was conducted using a modified version of the Composite International Diagnostic Interview. The objective of the survey was to examine the prevalence, age at onset, and socio-demographic correlates of alcohol and illicit drug use and abuse among USA adolescents. This

was done through a nationally representative sample of 10,123 adolescents aged 13 to 18 years. Lifetime estimates of alcohol and illicit substance use and DSM-IV diagnoses (Fourth Edition of Diagnostic and Statistical Manual of Mental Disorders*)*, with or without dependence were obtained through the survey.

The study found that by late adolescence, 78.2% of adolescents in the USA had consumed alcohol. Of these 47.1% had reached regular drinking levels defined by at least 12 drinks within a given year, and 15.1% met criteria for lifetime abuse. The opportunity to use illicit drugs was reported by 81.4% of the oldest adolescents, drug use by 42.5%, and drug abuse by 16.4%. The median age at onset was 14 years for alcohol abuse with or without dependence, 14 years for drug abuse with dependence, and 15 years for drug abuse without dependence. These findings suggest that by age 14 the pattern of drug use had already been established. This further reinforces the need for universal public health prevention interventions beginning in early adolescence.

The National Comorbidity Survey–Adolescent Supplement (NCS-A) conducted in the USA provided nationally representative data concerning the full trajectory of substance use and associated disorders in adolescence. This type of data was lacking and was considered necessary to further advance prevention and other public health initiatives. The report on the survey **(**Swendsen J, Burstein M, Case B, et al, 2012) first described the prevalence of 4 lifetime stages of alcohol use (use, regular use, abuse without dependence, and abuse with dependence) and 4 lifetime stages of illicit drug use (opportunity to use, first drug use, drug abuse without dependence, and drug abuse with dependence). Secondly the report estimated the prevalence of these stages by age, sex, and race/ethnicity; and thirdly it examined the association of these sociodemographic variables with the risk of transition among stages.

Survey results concluded that alcohol and drug use is common in US adolescents and the findings of the study indicate that most cases of abuse have their initial onset in this important period of development. Corroborating earlier studies, it was observed that prevention and treatment efforts would benefit from careful attention to the correlates and risk factors that are specific to the stage of substance use in adolescents.

The authors found greater rates for drug abuse (8.9%) than alcohol abuse (6.5%) among adolescents. Their conditional analyses also revealed high rates of regular use and abuse in adolescent substance users. Among alcohol users, 42.2% reported regular use, and 25.9% of these regular drinkers met criteria for abuse with or without dependence. For illicit substances, 40.5% reported using drugs after having had the opportunity to do so, and nearly 36.6% of drug users met criteria for abuse with or without dependence. These conditional rates are higher than base (unconditional) rates reported by prior surveys of youths and therefore provide additional information concerning risk of substance abuse after initial use during adolescence. The authors further indicated that the risk of drug abuse among adolescent users is of concern considering the recent findings which show a resurgence of marijuana use among adolescents, even surpassing use of nicotine, a finding which they surmised may reflect increasingly tolerant attitudes concerning the use of illicit drugs.

The trends of drug use among USA adolescents is comparative with those seen in a survey conducted in Barbados in 2010 and published in 2013 by the National Commission on Substance Abuse. The findings of the Barbados study showed that alcohol was used most often by adolescents in the 13 – 17 age group. In addition, a representative survey of 1,983 primary school students between the age of 9 -11 found that while 54% had reported lifetime prevalence of alcohol, 7% and 5% had reported lifetime prevalence of tobacco and marijuana respectively

(National Primary School Survey, 2009). When compared with findings of a representative survey of 2,239 students between 12 and 17 years of age, lifetime use of alcohol, tobacco and marijuana was recorded at 75%, 21% and 18 % respectively (National Secondary School Survey 2007). The trend of increasing use with increasing age has been observed in studies conducted in the USA and reinforces the need for a public health preventative approach to substance use and abuse that targets children and adolescents before the stage of initiation of substance use or as soon as possible after initiation.

Although the current prevalence (percentage of population who used substances within the 30 days immediately preceding the survey) was relatively lower than lifetime prevalence, at 34%, 3.5% and 6% respectively for alcohol, tobacco and marijuana in the 12-17 age group, there is still need to have interventions directed at further reducing use or eliminating use by adolescents. In assessing these findings it is important to note the possibility of the adolescents' fear of punitive consequences may have resulting in underreporting of recent substance use.

The report on the US National Comorbidity Survey stated that psychoactive substances are implicated in more than 12% of mortality worldwide and that their use constitutes the leading cause of preventable death. Because the early onset of substance use is a significant predictor of substance use behavior and disorders in a lifespan, the public health implications of the current findings are far reaching. That report concluded that prevention of both alcohol and illicit drug abuse requires strategies that target early adolescence and strategies that take into account the highly differential influence that population-based factors may have on each specific stage of substance use. The stages of substance use include opportunity to use, first drug use, drug abuse without dependence, and drug abuse with dependence.

RESEARCH PROJECT: IMPLEMENTATION OF STRENGTHENING FAMILIES PROGRAMME

The research project presented in this paper is the implementation of an intervention for prevention and early treatment of substance abuse in adolescents. The intervention is formulated on the Strengthening Families Programme (SFP), a family based prevention programme for families in which either the parents or youth are at risk or involved with substance use. The ultimate goal of the programme is to reduce substance use in youth and secondary goal is to offer support for parents and provide substance use education for youth. The age range of the youth participating is 12-16 years.

The SFP is provided through 14 weekly 2 hour meetings and it includes three separate courses: Parent Training, Children's Skills Training and Family Life Skills Training. The parent component is geared at increasing desired behaviours in children by using attention and reinforcements, communication; substance use education; problem solving; limit setting and maintenance. The children's component focuses on communication; understanding feelings; social skills; problem solving; resisting peer pressure; questions and discussion about substance use; and compliance with parental rules. Families practice therapeutic child-play and conduct weekly family meetings to address issues, reinforce positive behaviour and plan activities together. SFP uses creative retention strategies such as transportation, child care and family meals (Kumpher, 1999).

Outcome results based on pre- post- and 6 month follow-up measures show that this three- component design is more effective than single focused interventions that target either the parents or the adolescent. Child risk status was reduced in the areas of problem behaviours, emotional status and pro-social skills; parenting skills were improved; and improved family

relationships, family organization, reduced family conflict and increased family cohesion were observed. Evaluations also showed decreased drug use, depression, use of corporal punishment and increased parental efficacy as reported by parents. In addition to improved behaviour, children also reported less intention to use tobacco and alcohol.

The Programme Philosophy

The philosophy of SFP is based on the premise that what people do is mostly learned. People use various behaviours, both positive and negative, because they work for them. Parents' desire for the behaviour of their youths to change is insufficient to bring about results. SFP was therefore developed in recognition that the first step in making changes in the home, in the parent/youth relationship and in the youth's behaviour, is to have the adults examine their own behaviour and have change begin with them.

An adaptation of the SFP, Iowa Strengthening Families Programme (ISFP) was discussed earlier in the review of the studies by Spoth et al (2001and 2004) that were designed to address both the substantive and methodological gaps in earlier literature. Those studies provided longitudinal outcomes of a randomized, controlled trial evaluating two theory-based, family-focused interventions for general populations, Preparing for the Drug Free Years (PDFY) and the ISFP. The Iowa version of the SFP was a seven-week intervention while the PDFY was a five-week intervention.

The studies by Spoth et al further strengthened the assumption that brief, family-focused preventive interventions can be effective in the reduction of substance abuse when they follow scientific principles of prevention. The given prerequisite for effectiveness is that interventions must be theory-based and that they must address well established risk and protective factors originating in the family. Research results showed that epidemiological study of the influence of

these factors originating in the family demonstrate risk reduction and protection enhancement. Another variant of the Strengthening Families Programme, Strengthening Families for Parents and Youths 12- 16, was developed and implemented in Toronto, Canada. For this research project, this nine-week version was implemented in Barbados through two pilot interventions.

STRENGTHENING FAMILIES FOR PARENTS AND YOUTHS 12 – 16

Strengthening Families for Parents and Youths 12-16 (SFPY) is a curriculum-based programme that was developed by Parent Action on Drugs of Toronto, Ontario Canada as a strength and resilience-based family change intervention. It was developed for youth with substance use concerns and their families. This intervention was a revision of the SFP model which was developed by Dr. Karol Kumpher of the University of Utah in 1983 specifically to increase resiliency in children of parents who were involved in drug and alcohol abuse.

Results from this original programme showed that by increasing the coping skills of both the parent and the child, and by enhancing family relationships, the protective factors needed to increase the likelihood of reduced substance abuse and for improved mental health were increased. The SFPY maintains the original SFP model, but has tailored the curriculum to cater the adolescent population with consideration for retention and acceptability.

The SFPY gives parents the responsibility of bringing about changes in their youths by employing positive feedback such as praise, acknowledging positive behavior, clearly expressing expectations, negotiating limits, using appropriate consequences, controlling anger and managing stress. For youths, the main objective is to achieve active participatory engagement and experiential learning through the application of the "5 E's" – Engage, Explain, Experience, Explore, Empower (Buhler, 2011). The family component is designed to enhance and develop

positive parent-teen interaction, to reverse leadership and authority roles, to allow for intergenerational team building and to foster family decision making, pride and mutual respect.

The SFPY incorporated a new component on substance use and decision making for parents, youths and families. The objective of this component is to give parents a broader understanding of how substance use is integrated into the societies of both youths and adults and the importance of setting standards that take the safety of their teens into consideration. For the teens, the objective of this component is to show the risks of choices associated with substance use, while for the family the main objective is to achieve family involvement in the various processes.

Application of SFPY

The process of adapting the new model, SFPY, was documented in a Report issued in October 2011. The Report states that the aim of the adaptation was to increase resilience among at risk youth through their participation, along with their parent or care giver, in a skills building family change programme. Over a two-year period from 2009 to 2011 Parent Action on Drugs worked with its partners to produce the nine-week revision of the original 14-week programme Strengthening Family Programme. The adaptation was achieved through delivery and evaluation at eight separate sites, involving 69 families, 87 parents/caregivers and 91 youths ages 12-16 years. In addition, a trial involving six families was held at the conclusion of the project to establish fidelity measures and to simplify the programme evaluation tools.

This project examines the application of the adapted SFPY 12-16 to the Barbadian environment and seeks to establish its usefulness as a community-based intervention to reduce and prevent substance abuse among children and adolescents. The absence of evidence-based substance abuse programmes for children and adolescents was the main rationale for the

implementation the SFPY pilot project. Several programmes were being offered which had not been evaluated for efficacy, and which had no means of assessing the response of participants to their implementation. The SPFY programme satisfied both these criterions – its design was based on the outcome of research and it has built into its implementation, a user evaluation. The major findings of the Report on the adaptation of the model by the Parent Action on Drugs, Toronto, Ontario Canada, will now be presented.

The Toronto model was based on the need for a family-based early intervention initiative aimed at helping parents to understand their role in influencing their children in developing attitudes and behaviours that would negate substance abuse. In addition, parents would be provided with skills to facilitate communication, monitoring and role modeling as a means of prevention.

A Toronto health consultation had identified specific elements for parent and child interventions that were most effective in retention and in realizing the desired outcomes. It was determined that the most effective intervention would be evidence-based with elements that focused on building resiliency, providing support, mentoring, capacity building for both parent and child, in addition to being conveniently located, participatory and with a meal provided.

The Report also acknowledged the identification of risk and protective factors as a recurrent trend in literature relating to adolescent addiction and prevention. These factors have been shown to impact youth resiliency and subsequently have an impact on youth's vulnerability to problems with substance abuse and other health related issues and social concerns. Likewise family skill programmes have also been shown to effectively impact many of the problems and to contribute to youth health and family well-being.

The Report referenced studies that demonstrated the effects of poor parenting, inadequate monitoring, low degree of bonding between parent and child, family conflict and family modeling of substance use behaviours on children and their consequent susceptibility to alcohol and drug use. The need to provide interventions specific to groups of highest risk was also highlighted in addition to the need to focus on environmental risk factors and youth who live in vulnerable environments.

Based on these observations, the original SFP was developed as an evidence-based intervention to reinforce the positive parenting practices, build youth resiliency, and provide a targeted intervention for at-risk youth in vulnerable communities. The Report also demonstrated that the SFP has had positive outcomes for substance use in its reference to the USA Centre for Substance Abuse Prevention – CSAP cost benefit study that suggested that the programme had the greatest impact in schools and the community.

The SFPY intervention provides youths with support and reinforcement to live healthy drug-free lives. By providing parents with information on the developmental phases being experienced by the youths and the impact of these changes on their thought process and resulting actions, parents are better able to give the support that the youths need to reinforce positive decision making.

A number of advantages of the revised SFPY were noted in the Report. First it was stated that implementing a programme of about two months durations (9 weeks) was a much more feasible in terms of achieving desired enrollment. The original programme was 14 weeks in duration. In addition the shortened programme was also more cost effective.

Permission for Use of the Strengthening Families Programme

Dr. Karol Kumpher and the Lutra Group have ownership of the original Strengthening Family Model and have agreed to the use of the revised version, Strengthening Families for Parents and Youth (SFPY), by the Ministry of Health, Barbados. This revised version was designed by Diane Buhler for implementation by the Toronto Drug Strategy. The Ministry of Health has been in direct contact with the developers of the Programme through a practicing paediatrician in Barbados who has had direct involvement with the SFPY delivery in Toronto, Canada and has been assisting the Working Committee for the Substance Abuse Programme for Adolescents and Children (SAPCA) in formulating its application in the local environment.

The SFPY program follows a set curriculum that has been evaluated for its effectiveness. Implementing evidence- based programming for substance abuse is one of the primary objectives of this initiative and it is seen by the Ministry of Health as an opportunity to strengthen the delivery of substance abuse services and to enhance existing services provided for children and adolescents.

IMPLEMENTATION OF SFPY PILOT PROJECT IN BARBADOS

A consultant was contracted to develop a training module and to train a pool of persons who would have the capacity to expand the implementation programme after the Pilot Project is completed and evaluated. Trainees comprised individuals who are currently providing counselling and support services to high risk youths at the Centre for Counselling Addiction Support Services (CASA), the Edna Nicholls Centre, the HIV/AIDS Programme and the Juvenile Liaison Scheme. Six of the twenty individuals who received training in the delivery of SFPY, facilitated the Pilot Project. The delivery of the programme was coordinated and supervised by a Family Therapist.

The SFPY was implemented through three-hour weekly sessions over a nine-week period. Each session commenced with a meal which was followed by separate parent and youth sessions, and concluded with a joint family session. While the dinner provided opportunity for positive, family interaction, the parent and youth sessions were employed to reinforce relational skills-building and to foster the creation of protective factors such as effective parent-child communication, consistent parental monitoring and strategies for strengthening the family unit. This first cohort of the Pilot Project included ten (10) youths, each accompanied by one parent or guardian.

Six families of the 10 completed the first Pilot Project which was held from June to August, 2012. An evaluation conducted at its conclusion showed that the youths were generally more positive about their perceived place in the family unit and felt that being in the programme was generally beneficial. The parents similarly reported they had a more positive relationship with their youths and also had a better understanding of their needs, and an awareness of their developmental changes. The project coordinator and facilitators of the Pilot Project affirmed that that the programme was beneficial for both the youths and parents who were beginning to utilize the coping mechanisms and communication skills learnt. In addition, an increase in the level of commitment and accountability in the relationships between the parents and youths was also reported by the facilitators.

Inconsistent attendance by participants was noted as the major area of concern in the implementation of the Pilot Project and it was recommended that the process of recruitment needed to be reviewed, and that the use of incentives to promote retention should be adopted. The Strengthening Families for Parents and Youth 12-16 (SFPY) programme was successful in

making parents and youths more aware of their individual needs and of the benefits of strengthening the family unit, including the reduction in the abuse of drugs and alcohol.

However, it was found that more in depth counseling was needed to fully address the issues affecting the families involved since relationships between other family members also impacted the level of functioning between the parent and youth participating in the programme. It was recommended that a component should be included in the SFPY programme to address concerns of the entire family. This may be done through a follow-up intervention aimed at reinforcing the skills learnt.

It was also recommended that a second cohort of the Pilot Project should be implemented and that recruitment should be broadened to include participants who are functioning within the regular school system- that is students who have not had multiple disciplinary problems. It was also recommended that girls should be included in the second intervention.

SFPY Intervention: Cost Effective Response

The financing of the SFPY Pilot Project was provided through the Pan American Health Organization Biennium Work Programme 2012-2013. The financing provided for a consultant to develop a training manual and deliver training to 20 participants drawn from health and social services. The participants were all involved with youth either as teachers, social workers or counsellors and therefore already had the basic practical skills required for the delivery of the intervention. As a result training was conducted over a one-day period.

The greatest cost was allocated to the provision of meals for the nine weekly sessions. The family meal is considered to be an integral part of the intervention, providing an opportunity for positive, family interaction which lends to relational skills-building. A budget of BDS $7498.63 was allocated as follows:

Item	Cost (BDS$) (US $ 1.00 = BDS $ 2.02)
Consultant Fee	$ 2000.00
Stationery	$ 158.63
Meals for training sessions	$ 660.00
Meals for 9 weekly SFP sessions	$ 4680.00
Total	$ 7498.63

This budget however did not reflect the true cost of the intervention. The services of the six facilitators and the Project Coordinator were volunteered. In addition, the materials used during the presentation of the curriculum and the supplies and resources used for activities during the joint family sessions were donated by one of the substance abuse facilities.

Notwithstanding the services that were volunteered or donated, the cost of the intervention is considered to be efficient. It is anticipated that this project would strengthen services currently provided by the Centre for Counselling Addiction Support Services (CASA), the only community-based programme providing services to children and adolescents through short term outpatient counselling. The 2009 Technical Report on substance abuse services highlighted the need for community-based services to be standardized with regard to the utilisation of assessment tools and models of treatment. The Ministry of Health provides CASA with an annual subvention for its operation and therefore it is considered that this a tangible initiative directed at improving outcomes and developing sustainable interventions.

Report of SFPY Pilot Project

The nine-week SFPY curriculum implemented during this programme intervention covered the following topics:

i. Adolescent development and the roles and responsibilities of adolescents and teens. The ability to cope with or resiliency that allows adolescents to successfully maneuverer through this phase. The philosophy of positive behavior change was also introduced.
ii. Positive attention, praise and introduced 'teen time'
iii. Communication and its role in enhancing relationships
iv. Goal setting through identification and supporting of dreams and goals
v. Establishing fair limits and appropriate consequences
vi. Managing stress and anger
vii. Substance use and decision making
viii. Problem solving
ix. Review of previous sessions and presentation of certificates and graduation celebration

The SFPY Pilot Project was implemented as the first dedicated substance abuse programme for children and adolescents by the Inter-sectoral Working Committee established under the auspices of the Ministry of Health. The objectives of the Pilot Project were to:

i. Implement an evidence-based programme for substance abuse prevention and treatment
ii. Reduce the incidence of substance use in children and adolescents
iii. Provide support to parents and guardians of at risk youths
iv. Facilitate the development of relational and personal skills for youths and their families
v. Foster healthy and supportive environments for youths

The Pilot Project was divided into two phases, training of facilitators and the delivery of the SFPY programme. A one-day training seminar for twenty-two participants was facilitated by a consultant on May 19, 2012 at the HIV/AIDS Programme Office. The aim of the training was to provide individuals with the skills and competencies required to act as facilitators for implementation of the SFPY Pilot Project. Trainees included individuals who were currently providing counselling and support services to high risk youths within the private and public sector including Verdun, CASA, the Edna Nicholls Centre, and the HIV/AIDS Programme. It was anticipated that this training would have provided the skills for this group of trainees to act as trainers with the view to the implementation of the SFPY on a broader scale at the completion of the pilot project.

A training manual, developed by the consultant, was provided for each participant and the training was delivered through an interactive power point presentation. At the end of the training session participants completed a Training Evaluation & Self-Assessment Form (**Appendix 1**). The results showed that all persons clearly understood the purpose of the training and that the content and format were appropriate. The presentation style and style of delivery were also favourably assessed. Participants were provided with two primers before the event and these assisted in creating a common base on which the module was effectively delivered.

The training was successful in obtaining a commitment from participants to facilitate the pilot project, while others expressed their availability to provide any additional assistance that might be needed. The one-day training session was attended by a total of twenty-two persons, representing a wide cross-section of health, education and social services.

Seven of the trainees volunteered to facilitate the implementation of the Pilot Project, one acting as the Project Coordinator, two each were assigned to the parent and youth groups and the

remaining two acted as alternates. The Project Coordinator, a qualified Family Therapist, was responsible for preparing the weekly interventions with the facilitators in addition to sourcing and preparing props used in the activities for the duration of the project.

Referrals to SFPY

A total of 25 youths were referred to the SFPY Pilot Project. Twenty of these were boys and 5 girls. Referrals were reviewed by the facilitators and parents were contacted by the Project Coordinator. The referral from, developed by the consultant is attached at **Appendix 11.**

Nine of the referred families registered for the SFPY programme during an orientation session conducted on June 2, 2012 at the Centre for Counselling Addiction Support Alternatives (CASA). Facilitators assisted families with the registration process, while the consultant welcomed families, provided an overview of the SFPY, focusing on the benefits of programme and thanking families for agreeing to participate. The signing of consent forms by parents was also included in the registration process.

The delivery of the SFPY programme commenced on June 9 and the final session was held on August 25, 2012. Due to Crop Over activities, a national cultural programme, three sessions were rescheduled. Prior to the start of the programme an orientation for facilitators was conducted by the Project Coordinator. The aim of this orientation was to review the SFPY curriculum in detail in preparation for its presentation to the participants.

Table 1: Summary of Participants Registered for SFPY 12-16 Pilot Project

	Youth Information				Parent Information							
	Youth Age	**History of Arrest/ Incarceration**	**History of Drug Use**	**School Discipline**	**Relation to Youth**	**Parent Age**	**Marital Status**	**No of Children**	**Employed**	**History of Arrest/ Incarceration**	**History of Drug Use**	**Referring Agency**
1	15	None	Marijuana	Suspension	Mother	42	Single	7	Yes	None	None	ENC
2	13	None	None	Suspension	Mother	50	Married	4	Yes	None	None	ENC
3	16	None	Marijuana	Suspension	Mother	48	Married	5	Yes	None	None	ENC
4	15	None	Marijuana	Suspension	Mother	38	Single	2	Yes	None	None	CASA/ENC
5	15	Probation Department	Alcohol	Suspension	Mother	33	Single	3	Yes	Yes	Alcohol	ENC
6	15	None	Marijuana	Suspension	Mother	32	Single	5	Yes	None	Al / Mari	ENC
7	11	None	Marijuana	Suspension	Mother/Gran	35	Single	3	No	None	None	ENC
8	15	None	Marijuana	Suspension	Mother	42	Single	2	Yes	None	None	Other
9	11	None	Prescription	N/A	Mother	35	Single	2	Yes	None	None	Other

Al/Mari: Alcohol & Marijuana

ENC: Edna Nicholls Centre

CASA: Counselling Alternatives for Substance Abuse

SFPY Pilot Project Participation

A total of nine youths registered for the first SFPY pilot project. The youths, all males, were accompanied by their mothers and in one case, grandmother. This demographic is characteristic of the Barbadian society where many homes are headed by single female parents. Two of the nine mothers were married and with an average of four children each. The mothers ranged in age from 32 to 50 with the average age being 39 years. The youths' age ranged from 11 to 16 years with a mean age of 15.

All but one of the nine youths had been suspended from school at various times prior to registration with the SFPY programme, and seven of the families were referred to the programme by the Edna Nicholls Centre (ENC). The ENC provides an alternative school programme for students who have been suspended from secondary school because of behavioural problems, including drug use. The ENC programme is of two weeks duration with on-going enrollment and runs parallel to the normal school programme.

The profile of the participants is consistent with that described in the literature. The adolescents presented with multiple behavioural problems in addition to drug use or risk for drug use, and had already accessed several social and health services to address their issues.

Delivery of the Intervention: Focus Groups

The nine-week SFPY programme was designed with a built-in evaluation to be completed by participants, both youths and parents, at its conclusion. However, in order to obtain a preliminary assessment of response to the programme and its applicability to the local environment, focus groups were conducted during the fifth week of the intervention. A focus group was also held with the facilitators.

During the focus group parents reported that since the start of the programme, they have been more patient with their youth and more understanding. Parents also stated that they were utilizing the skills taught and as a result were able to communicate more effectively at home and to show appreciation to their youth. The parents also indicated that while their children were not always obedient, they were more willing to listen and generally more cooperative. The parents all agreed that the programme had been beneficial since the joint activities with the kids had allowed them to interact more than before, resulting in improved relationships.

The responses given by the youths relating to the benefits of the programme were also generally positive, though with less enthusiasm than the parents. The youth stated that they were appreciating the concerns of their parents, even though they thought that the parents were now asking too many questions and paying too much attention to their activities. The youth however noted that because of what they learnt during the sessions, they were making an effort to stay out of trouble and to avoid being away from home for long periods of time during the evenings. While some youths reported that relationships with their parents were improving, one participant stated that it had gotten worst. (See Focus Group questions at **Appendix 111**)

A focus group was also conducted with the facilitators to determine the response of the parents and youths during the programme intervention, and to assess any change in behaviours and attitudes during the first half of the implementation period. Facilitators indicated that the youth were less confrontational and were becoming better able to follow instructions and manage their emotions.

It was also stated that parents were beginning to communicate more and were generally responsive during the sessions. While new skills were learnt, parents reported difficulty in using those skills at home. Facilitators were of the opinion that the skills learnt by parents during the first half of the programme needed to be reinforced to increase their confidence to communicate more openly, provide positive support to their children and to praise them when progress is achieved or goals are met.

The first session of the intervention explored adolescent development and the roles and responsibilities of adolescents and teens. This introduction also examined the relationship between the developmental process and teen behavior. During the focus group facilitators were asked whether they thought parents/grandparents had a better understanding of this relationship and how it may influence the actions of the youths. The facilitators were of the view that parents were generally more aware, but that they were unable to link the behaviour exhibited by their youths to their physiological development.

These preliminary assessments were followed by a more in-depth evaluation which was built into the delivery of the Pilot Project and conducted during the final session. That evaluation was geared only to the participants, but facilitators were requested to complete a short, free answer questionnaire to assess their view on the delivery and appropriateness of the programme to the local community, and to provide recommendations for the improvement of its delivery. The output of this questionnaire will be discussed later in this paper.

Programme Attendance

A total of nine families registered to attend Pilot Project but attendance during implementation ranged from four to six families or 8 to 12 participants. This was below the anticipated level of participation, but there are several factors which may have contributed to the relatively low attendance.

Table 2: SFPY 12-16 Pilot Project Attendance

Session	09 Jun	16 Jun	16 Jun	30 Jun	07 Jul	14 Jul	11 Aug	18 Aug	25 Aug	Average
Parents	6	5	4	4	4	4	2	4	6	4.3
Youths	6	5	4	4	4	4	2	4	5	4.2

The Project Coordinator was responsible for weekly follow-up contact with participants and she reported that there were several issues which affected attendance. One of these was that parents' participation was affected by a number of variables included relations at home with other family members. In all of the families participating, there were other children in the household and these children, especially the younger ones, needed to be attended to during programme and this prevented the initial participation of some families.

In addition, the parents' personal relationships seemed to be a hindrance to their full participation. This was so because in most cases their current partners were not the fathers of the youth participating in the pilot project. Some also saw their attendance as punishment for their child's behavior. Although participation in the Pilot Project was not mandatory, it was associated with the child's negative behavior and therefore seen as a punishment for parents in addition to being an inconvenience. The requirement of parent

participation was cited as a barrier by referring agencies, and because of this it was difficult to get families to commit to the programme.

These factors may also be viewed as limitations to the implementation of the programme. The participating youths were drawn from a pool of students who had exhibited behavioural problems and who had participated in several programmes including those at the Edna Nicholls Centre, the alternative school for students suspended from regular school; the Counselling Addiction and Support Alternative, a community-based substance abuse facility for adolescents (also the location of the Pilot Project); and the Child Guidance Clinic located at the Psychiatric Hospital. Participation in this Pilot Project was voluntary, but may have been viewed by parents as another attempt by authorities to address their children's problems.

The inclusion of a meal was viewed as an added incentive by the developers of the programme. However, the meal provided was not seen as an incentive by the participants of this Pilot Project. In most cases the youths attended after having lunch purchased from fast food restaurants. From discussions among families it seemed that parents were on occasion experiencing guilt over their inadequate coping skills and that they tried to compensate for their inadequacy by giving their youth whatever they requested, including money to purchase lunch before attending the sessions.

Parents on the other hand, preferred their traditional Saturday meal would also have had lunch at home, before attending the programme. Although they would participate in the meal, it was evident that it was not an incentive for their attendance. On some occasions efforts were made in advance and with the participant's knowledge to

include some of these traditional items in the meals provided, and to include items recommended by the youths.

The purpose of the meal was also to create a family atmosphere, where everyone could come together for a 'family meal' before the start of the formal programme. From observation it was found that the youths especially were uncomfortable sitting with their parents and it reflected the absence or lack of positive family interactions at home.

As the Pilot Project progressed however, both youths and parents became much less self-conscious and began to positively interact with each other and with the facilitators. In addition, during the meals, issues were raised relating to conflicts at home between the youth and parent or between the youth and other family members or persons in the community. This in provided the facilitators with some insight into the various problems with which the families were faced and allowed for informal intervention to reinforce skills that were learnt at earlier sessions relating to communication, respect, goal setting, anger management and conflict.

Having the family meal did achieve the desired result of creating an atmosphere of trust and confidence among parents, youths and facilitators. Barriers were gradually broken down and parents freely offered each other advice on the various issues that affected them. Because of the variance in the benefits of serving a meal, it was recommended that the actual composition of the meal be changed to offer light refreshments instead of fully prepared meals.

Pilot Project Evaluation

The SFPY had an evaluation component included in the final session. The aim of the evaluation was to determine the extent to which the skills and competencies shared

during the nine-week intervention were being utilized by the participants, both parents and youths. Participants were asked to respond to statements by grading themselves on a scale from 1 to 5 with one indicating disagreement with the statement, five indicating strong disagreement 3 representing a neutral response.

Parent Response to Pilot Project

The first set of statements in the evaluation sought to determine how things have been for the parents and their relationship with their youth since the start of the programme. Fifty percent of the parents agreed with the statement - '*I use positive attention (e.g., praise, smile) to show my teen I appreciate what they are doing*', while 33 % strongly agreed. On the other hand 50% of the parents had a neutral response to the statement – '*I use my understanding of teen development in my interactions with my teen*', while 33% agreed (See Parent/ Care Giver Questionnaire at **Appendix 1V**).

These outcomes are similar to those observed during the focus group which was conducted at the mid-way point during the intervention. Parents demonstrated that they were able to use some of the skills to enhance their relationship with their youths but were unable to make the correlation between the developmental processes and the behaviours exhibited.

With regard to issues relating to substance abuse and parents' expectations, there were more positive responses and this demonstrated that the parents were better able to appreciate the applications that were directly related to the problems being faced. Eighty-three percent of the parents strongly agreed with the statements – '*I let my teen know my expectations and standards about the use of alcohol, tobacco and other drugs*' and '*I use clear directions with my teen to let them understand what I expect*'. This showed that the

Pilot Project was successful in helping parents to arrive at concrete positions in relation to drug use by their youths and to articulate these positions.

Communication forms an integral part in strengthening family relationships and instilling confidence and positive attitudes in teens. Statements relating to the level of communication since the start of the intervention indicated generally good outcomes in this area. Sixty-six percent of the parents strongly agreed with the statements – '*I try to be respectful when I am communicating with my teen*' and '*I feel better about the way my family life is organized*'. However, in response to the statement – '*My teen is communicating more respectfully*' 50 % gave a neutral response, neither agreeing nor disagreeing, while only one parent strongly agreed. This response is to be expected since the burden is being placed on the parents to bring about the change in their environment with the expectation that the teens would respond more positively in return.

The second section of the evaluation attempted to elicit the parents' thoughts of the programme itself. Eighty-three percent strongly agreed that overall, they liked the programme while 66 % strongly agreed that it made a difference in their life. None of the participants disagreed or were neutral in these responses. In relation to the impact on their teens however, the results were less positive. Thirty-three percent strongly agreed that '*this programme has made a difference in my teen's life'* while 50% agreed. This was more evident in the response to the statement '*I think my teen liked the programme'* where 33% disagreed; 16% each strongly disagreed, were neutral, agreed and strongly agreed respectively. However 5 out of the six parents or 83% agreed with the statement – '*This programme has made a difference in my teen's life'* while the other parent gave a neutral response. Similarly, 83% of the parents agreed that they could see positive

changes in their teen's behaviour since starting the programme. All the parents but one strongly agreed that they would recommend the programme to other parents.

Responses to the final section of the evaluation indicate that all the parents strongly agreed (50%) or agreed (50%) that they learnt effective parenting skills, improved their communication skills and understand their teens more. Further, 83% agreed that their family was closer and more respectful while 66% indicated that their quality time together as families had increased. A level of camaraderie also developed among the participating families and this was evidenced by 100% of the parents strongly agreeing that they enjoyed being with other families with similar issues.

These outcomes demonstrate that the Pilot Project was successful in strengthening the family by improving communication and parenting skills and by positively influencing the behavior and attitudes of the teens who participated. These influences are all considered as protective factors that build resilience in teens and enhance their ability to avoid harmful behavior, including substance abuse.

Youth Response to Pilot Project

Five of the six youths who participated in the Pilot Project completed the evaluation of the programme. In relation to their response to the assessment of home and family life since the start of the programme, three of the youths agreed that that they felt more accepted at home while the remaining two strongly agreed. Although one of the youths disagreed with the statement that his parent praise him more and one strongly agreed that his parent is more critical of him, they all strongly agreed with the statement that '*My parents(s) make(s) more effort to support me*'. This demonstrates the effectiveness of the programme which placed emphasis on the parent's responsibility in

bringing about positive change in their families and in the lives of their children, even if the change is not readily welcomed by the youths (See Youth Questionnaire at **Appendix V**).

On their thoughts about the programme, the youths generally felt that it was beneficial; that their relationships with their parents were improved; and that they had learnt new skills that were helpful. They all agreed that the topics discussed were important and all but one saw positive changes in some of the ways in which they interacted with their parents. However, unlike their parents, the youths were less inclined to recommend the programme to their peers. While one strongly agreed that he would recommend the programme, three were neutral and one strongly disagreed. This response is however expected since attendance at the programme would not be seen as a 'cool' or 'fun thing' by their peers.

Facilitators Response to Pilot Project

The evaluation of the SFPY did not include a component for the facilitators or administrators of the programme. It was however considered important to include such an assessment, particularly with the view of implementing a second cohort to improve its delivery and to make it more efficient and effective. Facilitators were therefore asked to provide responses to the following questions at the conclusion of the Pilot Project:

I. Do you think that the programme was effective generally?
II. What do you think were the main hindrances to the implementation of the programme?
III. What changes would you recommend to improve the delivery of the programme?

IV. Did the programme meet your expectations?

One of the facilitators summarized her response as follow:

> *"I believe the programme was generally effective although there were challenges in terms of attendance and punctuality. The information was received by the participants (students) although it was challenging at times to keep their attention and to engage them in meaningful discussion. To improve the programme I believe that the facilitators should remain constant so that participants can become familiar, it would also allow for the facilitators to have continuous knowledge of the proceedings from the previous week and areas where follow-up intervention maybe needed. My general expectations were met, I was able to witness how group work can be effective and how developing certain skills are necessary for me to improve professional abilities".*

The comment on having constant facilitators referred to the fact that there were four designated facilitators for the two groups – parents and youths – and two additional facilitators who acted as alternates. The facilitators therefore worked out a schedule among themselves to accommodate planned vacation and other absences. This arrangement worked very well in terms of coverage, but probably was not in the best interest of the programme, where continuity was necessary for maintaining momentum. This was particularly so for the youth group for whom achieving and maintaining a relationship or alliance was critical for the successful delivery of the curriculum.

One of the facilitators attached to the parent group noted that:

> *"This programme brought parents to the realization that the change really started with them taking responsibility for some of the behaviour displayed by their teens at home and elsewhere.*
>
> *This programme's therapeutic approach motivated parents into sharing their feelings and the challenges they face within their various families. It must be noted that most of the family related issues were similar deriving from poor parenting skills.*
>
> *It was evident that most families spent little time together there were neither rules nor boundaries as a result very little respect for authority at home or at school. The programme addressed these important areas giving parents the much needed tools to work with in these areas. It was evident that much of the existing issues were related to these above mention challenges.*
>
> *The group format approach offered the therapeutic environment in which parents were able to be supportive of each other. Realizing they have much in common as it relates to the presenting problems of their teens and similar styles of parenting which was not effective. The programme was able address them due to the supportive nature of the group format".*

Regarding areas for improvement in the delivery of the programme, facilitators provided recommendations relating to the selection of participants and retention strategies:

"Looking at ways of increasing the attendance of participants through possibly looking at giving a weekly stipend to participants"

"The selection process of families can be reviewed...Retention strategies like more incentives or rewards e.g. funds for transportation".

"Incentives for both clientele and presenters could also be considered you might also want look getting stake holders from the private sector to fund the programme..."

"Next time you could try to have both male and female children in the group as well as try to get fathers involved in the program. Also, try to have the program remain within the stipulated time-frame as well as try to provide a stipend for the facilitators".

The inconsistent attendance by participants was seen as one of the major weaknesses of the programme. It was felt that special attention needed to be given to recruitment and that retention strategies should be employed, including the provision of incentives.

The absence of incentives for facilitators was seen as one of the hindrances of the programme. It should however be noted that all the facilitators exhibited a very high level of commitment and personal interest in the success of the Pilot Project. Early notice of planned absences was always given, and alternates were well prepared for their sessions. Facilitators were also responsible for set up of the rooms, servicing of meals, and clean up at the end of each session. These duties were all done voluntarily and without any special request by the Project Coordinator who also participated in these activities. To accommodate these necessary preparations, all facilitators and the Project

Coordinator spent an average of five hours on site during each of the nine sessions of the programme.

The facilitators all reported the Pilot Project did meet their expectations and that it was effective in meeting the needs of the participants. The materials provided for learning aides and activities were appropriate and enhanced the delivery of the programme. It was reported that the skills and materials utilized in the SFPY Pilot Project have also been incorporated by the facilitators in their daily work and thus provided an opportunity for personal development.

It was generally felt that the Pilot Project was a success and that the programme should continue with particular consideration given to selection and recruitment of participants and remuneration for facilitators.

Conclusion

The SAPCA Pilot Project concluded with a review of all the topics covered in the previous eight sessions within the parent and youth groups, followed by a graduation with the presentation of certificates. Six families completed the programme and an evaluation conducted at the conclusion showed that the youth were generally more positive about their perceived place in the family unit and felt that being in the programme was generally beneficial. The parents reported similarly that they had a more positive relationship with their youths and also had a better understanding of their needs, and an awareness of their developmental changes.

The first Strengthening Families for Parents and Youth 12-16 (SFPY) Pilot Project was successful in making parents and youths more aware of their individual needs and of the benefits of strengthening the family unit which included the reduction in the

abuse of drugs and alcohol by youths. However, it was found that more in depth counseling was needed to fully address the issues affecting the families involved. Relationships between other family members also impacted the level of functioning between the parent and youth participating in the programme. It is recommended that a component should be included in the SFPY programme to address concerns of the entire family. This may be done through a follow-up intervention aimed at reinforcing the skills learnt.

Recommendations

At the conclusion of the Pilot Project a number of recommendations were made for improving the delivery of programme. The recommendations included:

1. Implementation of a second phase of the Pilot Project in order to provide more comprehensive base-line information on which a more meaningful evaluation could be conducted.
2. Participants for the second phase of the Pilot Project should be drawn from a broader pool and not limited to persons who have already accessed services through the Probation Department, Juvenile Liaison Scheme or the Edna Nicholls Centre.
3. Obtaining referrals directly through the school system. Participants would therefore not be limited to children who have had to be removed from the regular school system, but also would include those who are functioning successfully while exhibiting risk factors associated with substance abuse.
4. Remuneration for the Project Coordinator and facilitators in the second phase of the programme.

5. Establishment of formal links with NGOs and related services to provide follow-up family therapy for families at the conclusion of the pilot project.
6. The provision of additional incentives, including childcare and transportation, for programme participants of the proposed second cohort.

Proposal for 2nd Phase of the SFPY Pilot Project

A proposal for a second phase of the SFPY Pilot Project to cater to 12 families was submitted to the Ministry of Health for approval. The projected budget of BDS $20,100.00 was estimated as follows:

Meals 30 persons X $20 X 9 (sessions) (This estimate is based on meals for 24 participants, 1 Project Coordinator, and 5 facilitators)	$5,400.00
Educational materials (Proposed NCSA contribution)	$1,200.00
Honorarium for Project Coordinator and Facilitators	
Project Coordinator	$2,700.00
Facilitators (5) (Project Coordinator: *$100.00 per hour; 5 facilitators $75.00 per hour (3 hours X 9 sessions) - Coordinator is responsible for supervising facilitators, monitoring the delivery of the programme, preparing materials for weekly interactive activities and weekly follow-up with parents)	$10,125.00
Project Location Fee - 'Paxhill', Girl Guides Association Headquarters	$675.00
Total Estimated Budget	**$20,100.00**

IMPLEMENTATION OF SECOND SFPY PILOT PROJECT

Based on the recommendations of the Report of the first Pilot Project, the Ministry of Health approved the budget for the implementation of the second SFPY Pilot Project in its 2013 – 2014 Estimates of Expenditure. As indicated in that Report, the intention was to broaden the scope of the programme by including youths who were at risk for substance abuse, and by including females to provide more comprehensive base-line information on which to conduct an evaluation of the delivery of the intervention in Barbados.

Training of Facilitators

Two weeks prior to the implementation of the second SFPY pilot project, a refresher training course for the facilitators was conducted at the Ministry of Health. The opportunity was also used to review issues that arose during the delivery of the first cohort of the project and to agree on strategies for improving outcomes.

The training reviewed the following components within the SFPY curriculum:

- Understanding roles and responsibility within the family unit
- Praise – giving and receiving
- Communication
- Expectations and Goals
- Setting fair limits and appropriate consequences
- Handling stress and anger
- Substance use – demystifying use and correct information on substances
- Problem solving and moving forward

The facilitators who delivered the first programme participated in the refresher training and facilitated the second cohort. This allowed for discussion during the training session on issues that may have impacted the effectiveness of the initial intervention, especially as it related to attendance. It was noted that the breaks in the programme, due to Crop Over activities (a national cultural event), contributed to the below average attendance. The importance of completing the second cohort of the pilot project before the start of major Crop Over activities was therefore seen as necessary for good attendance.

Referrals to the 2nd SFPY Pilot Project

The Working Committee for the Substance Abuse Programme for Children and Adolescents (SAPCA) explored strategies for getting referrals for female youth participation in the intervention. An observation was made that it was more difficult to get girls to participate in such programmes since experience had shown that parents readily sought assistance for their male youths, but only did so for girls when their problems appear unmanageable. It was therefore felt that girls were not benefitting from available prevention and treatment interventions and as a result they were presenting with more complex comorbid problems involving substance abuse use, mental health and physical health problems.

The response to the first pilot project substantiated the observation that assistance was more readily sought for male youths. Referrals would have been requested from the legal and social agencies providing services to children and adolescents, and responses were only received for males with behavioural problems, including substance use. A universal intervention targeting all students from specific grades of selected schools

would have provided a representative sample of the population. This was the methodology used in the Spoth et al study (2001 and 2004) where schools were randomly selected in the state of Ohio, USA and all students in the sixth grade were screened for participation. Limited financial resources however restricted broader participation and referrals from schools and social agencies was utilised instead.

For the second pilot project invitations were sent to the principals of secondary schools inviting them to refer families of female adolescents who may be at risk or who had a history of drug use. During one of meetings of the Working Committee direct calls were made to secondary school Guidance Counsellors who have direct responsibility for making student referrals. In response to these requests, referrals were received for the families of 15 girls and after initial screening by the Project Coordinator, eight families confirmed participation in the second SFPY pilot project.

The purpose of going directly to the schools was to widen the participation to include persons who had not yet accessed treatment and remedial services through CASA, Edna Nicholls Centre, the Probation Department and the Juvenile Liaison Scheme of the Police Force. These were the direct route of referrals for the first pilot project and it was intended to provide the second intervention for youths who were exposed to some risk factors, but who had not yet been integrated into the treatment and care cycle.

Six of the youth participants in the second pilot project did not report previous drug use or, as in one case, was in only exposed through familial contact with a another teenager who was a user. The delivery of this second intervention was therefore seen as both a preventative initiative as well as a treatment initiative.

Orientation for participants was held one week prior to the commencement of the pilot project which was implemented during the period May 25 – July 20, 2013. Facilitators assisted families with the registration process, while the Project Coordinator welcomed families and provided an orientation of the SFPY, focusing on the benefits of programme and thanking families for agreeing to participate. The signing of consent forms by parents was also included in the registration process. The nine weekly sessions of the SFPY programme ran on scheduled with consistent attendance by participants.

Table 3. Summary of Participants Registered for SFPY 12-16 Pilot Project: 2nd Cohort

Youth Information					Parent Information							
	Youth Age & Sex	**History of Arrest/ Incarceration**	**History of Drug Use**	**School Discipline**	**Relation to Youth**	**Parent Age**	**Marital Status**	**No of Children**	**Employed**	**History of Arrest/ Incarceration**	**History of Drug Use**	**Referring Agency**
1	14 (F)	None	None	N/A	Mother	39	Married	2	Yes	None	None	FT
2	11 (F)	None	None	N/A	*Mother	30	Single	2	Yes	None	Al/Mari	Parent
3	14 (F)	None	Marijuana	Suspension	*Guardian	30	Single	2	Yes	None	Al/Mari	ENC
4	15 (F)	None	Marijuana	Suspension	Mother	35	Single	3	yes	none	None	ENC
5	12 (F)	None	None	N/A	Mother	38	Single	4	Yes	None	None	ENC
6	14 (F)	None	Alcohol	Suspension	Mother	53	Single	2	Yes	None	None	ENC
7	13 (M)	None	Marijuana	N/A	Mother	39	Single	1	Yes	None	None	FT
8	16 (F)	None	None	Suspension	Mother	36	Single	2	Yes	None	None	GGA
9	13 (F)	None	None	N/A	Mother	50	Single	2	No	None	None	ENC
10	15 (F)	None	None	N/A	Mother	38	Single	4	No	None	None	School

*Represents one parent accompanied two youths

Al/Mari: Alcohol & Marijuana
ENC: Edna Nicholls Centre
FT: Family Therapist
GGA: Girl Guides Association

SFPY Pilot Project Participation

A total of 10 youths and nine parents or guardians participated in the second pilot project. The youths range in age from 11 to 16 years. In contrast to the first pilot project where all the youth participants were male, nine of the 10 youths were female. None of them had histories of incarceration; three had reported marijuana use and one, alcohol use; four had received suspensions from school for behavioral problems. Despite efforts to obtain referrals directly from secondary schools, the majority of the registered participants were referred through the Edna Nicholls Centre (the alternative school programme for troubled youths). Attendance at this Centre is however limited to two weeks and as a result students would have been enrolled in normal school for the duration of the pilot project.

As in the case of the first project, only mothers or female guardians accompanied the youths. One parent accompanied both her daughter and step daughter. The average age of the parents was 39 years and all but one of them was single. The parents had an average of three children, including their participating youth, and two of them were unemployed.

Focus Groups

As with the first cohort of the pilot project, focus groups were conducted during week five of the intervention to determine the initial response of parents and youths to the implementation of the programme, and to assess general applicability of the SFPY programme to the local environment. A focus group was also held with the facilitators to determine any changes observed among parents/guardians and the youths. The structure of the Focus Group Outline was identical of that administered during the first Pilot Project.

The skill that most parents reported learning during the first half of the project was to communicate effectively with their youths. They also recognised that children have some rights and

acknowledged the need to negotiate with them. Parents also reported that they were able to use newly learnt skills at home; were more tolerant and better able to control their anger.

Parents also indicated that they paid more attention to their youth's needs and that it had become a little easier to communicate with them. In addition, it was generally felt that relationships with other family members in the home had improved slightly. With regard to changes in their youth's behaviour at home, parents thought that they needed to be more respectful and obedient.

Parents were generally of the opinion that the programme so far had been very helpful, and acknowledged that even though they were unable to apply all of the skills learnt, they were very important to building good relationships within the family. The youths reported that the most important things learnt so far were the need to be less angry and more respectful and understanding. One youth stated that the skills taught would "protect you from the world."

The facilitators indicated that parents were very receptive and that they were identifying with strategies to manage behaviours in the home setting. In addition, parents were freely discussing existing issues and offering solutions to each other. It was also stated that parents were making a definite effort to complete home assignments. The parents in this second cohort were much more engaged in the programme when compared with those in the first pilot project. They freely expressed appreciation for the opportunity to participate in the programme and did not require weekly follow-up reminders to ensure attendance.

This compares starkly with the attitudes of most of the parents who participated in the first cohort. Although it was observed that parents sought assistance for male children more readily that those of females, it appears as if the parents of males were generally detached from the intervention process. The parents in the second cohort exhibited personal involvement in the process and were aware that its success was dependent on their response. The impact on parental involvement in the SFPY intervention and the differences between parental involvement of male youth participants as

opposed to parental involvement of female youth participants are areas that should be examined in future research.

Facilitators also observed that parents were trying to 'talk to' their children, instead of 'talking at' them and that the communication between them – parents and children – had improved. As a result children were also observed to be more cooperative. These preliminary assessments were followed by a more in-depth evaluation which was built into the delivery of the SFPY and conducted during the final session of the intervention. The output of this questionnaire will be discussed in the Pilot Project Evaluation.

Attendance

There was consistent attendance by participants during the second pilot project. There was an average of nine youths (90%) attending the intervention over its duration, while average attendance for parents or guardians was eight (88%). There were nine registered parents and 10 registered youths.

This contrasts to inconsistent attendance in the first cohort of the Pilot Project when attendance averaged 66% for both parents and youths. Improved attendance was attributed to arrangements made to accommodate siblings through the provision of volunteer child care services by the Girl Guides Association; and also by efforts made by facilitators to develop meaningful relationships with both parents and youths. One of the families was unable to complete the programme because of overseas travel and one parent left the programme, while her child continued under the guardianship of another parent.

Table 4: SAPCA Pilot Project Attendance: 2nd Cohort

Session	25 May	1 Jun	8 Jun	15 Jun	22 Jun	29 Jun	6 Jul	13 Jul	20 Jul	Average
Parents	8	9	9	6	8	8	7	8	8	7.8
Youths	8	10	10	7	10	10	9	10	10	9.3

PILOT PROJECT EVALUATION

The SFPY had an evaluation component included in the final session. The aim of the evaluation was to determine the extent to which the skills and competencies delivered during the nine-week intervention were being utilized by the participants, both parents and youths. Participants were asked respond to statements by grading themselves on a scale from one to five with '1' indicating strong disagreement with the statement, '5' indicating strong agreement and '3' representing a neutral response. This evaluation format is identical that of the first Pilot Project.

Parent Response to Pilot Project

The first set of statements in the evaluation sought to determine how things had been for the parents and their relationship with their youth since the start of the programme. Forty-three percent of the parents agreed with the statement '*I use my understanding of teen development in my interactions with my teen*', while 47% gave a neutral response.

Similar to the responses given during the focus group, parents demonstrated that they were able to use some of the skills to enhance their relationship with their youths and were beginning to appreciate the correlation between the developmental processes and the behaviours exhibited. Parents' response to the statement – "*I use clear directions with my teen to let them understand what I expect*', demonstrated that parents were taking more responsibility with 47% strongly agreeing and 43 % agreeing. Identical responses were also given to the statement indicating that - "*I let my teen know my expectations and standards about the use of alcohol, tobacco and other drugs*", with 47% strongly agreeing. Being able to provide clear directions to let youths understand parent expectation was also positively reported by parents.

Communication forms an integral part in strengthening family relationships and instilling confidence and positive attitudes in teens. Statements relating to the level of communication since the start of the intervention indicated generally good outcomes. Sixty-six percent of the parents strongly agreed with the statement – '*I try to be respectful when I am communicating with my teen*' and '*I feel*

better about the way my family life is organized'. However, 47% of the parents agreed with the statement - '*My teen is communicating more respectfully*', while the remainder disagreed. This response showed some improvement from the first cohort where 50 % of the parents gave a neutral response, neither agreeing nor disagreeing, with one parent strongly agreeing. With respect to utilizing skills learnt during the intervention to solve problems at home, 50 % of the parents affirmed that this was being practiced while the remainder provided neutral responses.

The second section of the evaluation attempted to elicit the parents' thoughts of the programme itself. The parents all agreed that overall, they liked the programme and confirmed that it made a difference in their lives. None of the participants disagreed or were neutral in these responses. Like responses given in the first cohort, however, the impact of the programme on the youths as perceived by the parents, was less positive. While 50% strongly agreed that '*this programme has made a difference in my teen's life'*, the remainder gave neutral responses or strongly disagreed.

The apparent discrepancy between the parent's positive perceptions of the programme as opposed to its perceived benefits by their youths should not be seen as negating its impact. The intervention does place the onus on the parents to bring about positive changes in their environments with the understanding that their youths would be positively influenced as a result. It was therefore important for the parents to recognize the benefits of applying the skills taught and their ability to make a difference in their teens' lives.

This is borne out in responses to the final section of the evaluation where 86 % of the parents agreed that they learnt effective parenting skills, with 57% having improved their communication skills and 47% experiencing an improvement in quality time together as families. Similar to the first cohort, a high level of camaraderie also developed among the participating families and this was evidenced by 100% of the parents agreeing that they '*enjoyed being with other families with similar issues*'.

These outcomes demonstrate that the Pilot Project was successful in strengthening the family by improving communication and parenting skills and by positively influencing the behavior and attitudes of the teens who participated. These influences are all considered as protective factors that build resilience in teens and enhance their ability to avoid harmful behavior, including substance abuse.

Youth Response to Pilot Project

The evaluation of the programme was completed by each of the 10 youth participants. Their responses to the questionnaire indicated that they had been positively impacted. This was reflected in their perception of their role in the family, and the value of their relationships with their parents or guardians. Fifty percent indicated that they felt more accepted at home, while 70% agreed with the statement – "*My parent(s) make(s) more effort to support me*".

To further reinforce their feelings of self-worth, 60 % of the youths indicated that they felt that their place in the family was recognized and that they were receiving more praise from their parents. Eighty percent of the youths also acknowledged their parent's efforts by agreeing with the statement - "*I appreciate the effort my parent(s) has/have made coming here*".

On their thoughts about the programme, the youths generally thought that it was beneficial; that their relationships with their parents were improved; and that they had learnt new skills that were helpful. Sixty percent stated that they liked the programme and agreed that they learnt things that were helpful. More significantly, 90 % indicated that they would recommend the programme to their peers. This showed a marked improvement from the first cohort in which only 20% of the youths indicated that they would recommend the programme.

Pilot Project Expenditure

Approval was granted for the implementation of the 2nd Pilot Project based on an estimated expenditure of $20,100.00 as documented above. The cost of implementing the 2nd Pilot Project was

however $2,475.00 less than estimated with a total expenditure of $17,625.00 which was utilised as follows:

Catering Service:	$4,950.00
Project Location Fee	$ 525.00
Project Coordinator	$2,700.00
Facilitators	$9,450.00
Total Expenditure	$17,625.00

Conclusion

The second cohort of the SAPCA Pilot Project concluded with a review of all the topics covered in the previous eight sessions within the parent and youth groups, followed by a graduation with the presentation of certificates and gifts donated by NGOs and private business owners. Eight adults and 10 youths completed the programme and an evaluation conducted at the conclusion showed that the youth were positive about their perceived place in the family and felt that they were recognized as valued family members. The youth also acknowledged the efforts being made by their parents and guardians to improve the family environment and to provide them with guidance and support.

The parents freely expressed their gratitude for being included in the programme with most of them conveying the view that its duration should have been longer. They also indicated that the skills learnt had assisted them in better managing their relationships with their youths and led to better understanding of their needs.

The second cohort of the Strengthening Families for Parents and Youth 12-16 (SFPY) programme had a positive impact on the families that participated. This was demonstrated both in their consistent attendance and through their interactions during the delivery of the curriculum. The parents and guardians were particularly involved in the process and consistently participated in the interactive sessions.

The positive outcome of this intervention realised the goal to decrease risk factors and increase protective factors related to adolescent substance use. The secondary goal to offer support for parents and provide substance use education for youth was also achieved. Evaluation of both cohorts demonstrated that it was beneficial for both the youths and parents who were beginning to utilize newly learnt coping mechanisms and communication skills. An increase in the level of commitment and accountability in the relationships between the parents and youths was also reported by the facilitators of the pilot projects.

The absence of a control group and/or an alternative treatment intervention does not allow for comparisons in the responses of the parents and the youths to the evaluation of the intervention. The extent to which changes in attitude are attributed to the SFPY intervention cannot therefore be ascertained. This could only be done through the literature review that presented comparative studies using alternative interventions and control groups.

The literature review has demonstrated that this preventative and early treatment model has been successful at reducing the incidence of drug use among young persons with long-term impact. The intervention in effect has the capacity to decrease the lifelong impact that substance use and abuse have on individuals by addressing the issue in the early stages of the drug use cycle. The ability to reverse negative impacts such as mental illness and lifelong dependency has been demonstrated in more in-depth studies done in North America, involving multiple site interventions with post-baseline assessment to determine future impact (Spoth et al, 2001).

The pilot projects implemented demonstrated that the SFPY's core values and application mechanisms are easily transferable to the deferring localities, including Barbados. It is recommended that this programme be implemented through a national public health initiative, utilising multiple sites including polyclinics, schools, churches and community centres to achieve the desired impact.

Limitations

This project documents the process of implementing an evidence-based substance abuse programme for children and adolescents that is intended to enhance existing services. The SFPY programme was implemented through two nine-week pilot projects, involving participants from a total of 16 families, each represented by an adolescent and a parent or guardian. Six families participated in the first pilot project while 10 participated in the second. Due to the limitations of the study which include small sample size, lack of a control or comparison group, lack of randomization and follow-up, conclusive evidence cannot be derived from the study. However, the study still serves as pilot of an evidence-based programme that has not yet been tested in Barbados. It provides useful information for the wider application of the SFPY intervention in the community and in addition, it provides a theoretical framework for empirical research on substance abuse in the adolescent population in Barbados.

Substance abuse programmes provided by NGOs for the adolescent population in Barbados are adhoc in nature, with no reference to evidence or to a theoretical framework. This project is actually a response to an assessment of these services which stated that "*There does not appear to be any particular model of addiction treatment; treatment appears to be eclectic in approach. This is not the most cost effective way to deliver care and makes it difficult to manage, supervise and train staff*". (Panzarella, 2009, p. 26). This assessment by a PAHO consultant was followed by a recommendation for substance abuse services to adopt evidence-based practices such as Cognitive Behavioral Treatment (CBT) with Motivational Enhancement Therapy for Adolescents for use in outpatient treatment. A review of studies conducted has shown that interventions based on the Strengthening Families Programme have been found to be more effective than CBT and similar models used in the treatment of adolescents.

The small sample size of the study impacts the validity of the results and limits generalization of its findings. The main reason for the small sample size was the requirement that a parent or

guardian participate with the youth in the programme. This presented a difficulty for the majority of families contacted and resulted in parents not being able to commit to attending the interventions, and the consequent small sample size.

It was felt that the timing for the delivery of the programme, Saturday afternoon at 2:00 p.m., would have facilitated the attendance of parents. However, this was counteracted by the fact that traditionally, most youth oriented programmes only required the attendance of the youth with parental permission, and the parents could not be persuaded of the benefits of their participation. This problem would need to be specifically addressed in the proposed wider implementation of the programme. Attention should be given to implementing strategies to successfully recruit parents and retain their participation in the programme. Utilising traditional and social media to market the programme to both adolescents and their parents is one initiative which may be employed to increase the sample size. Information sessions with Parent Teachers Associations, particularly at the start of the new school year, should also lead to increased participation by parents.

Furthermore, due to its small size as well as the mode of recruitment, the sample is not representative of the general adolescent population or the sub-population of interest, and as a result, the external validity of the study is weakened. Given the limited financial and human resources available, it was decided to implement a pilot project based on the SFPY and to make it available to families who had already accessed substance treatment services or who were being considered for referral to these services within the school system. This presents a limitation because the responses of these individuals to this study may have been influenced and confounded by previous exposure to other substance abuse programmes.

An attempt was also made to obtain referrals directly from the schools to widen the participation to include persons who had not yet accessed treatment and remedial services through CASA, Edna Nicholls Centre, the Probation Department and the Juvenile Liaison Scheme of the

Police Force. However, the majority of students participating in the pilot studies had accessed at least one of these services.

These limitations are further compounded by the absence of a randomized selection of participants and a control or comparison group. One of the main purposes of the study was to determine the applicability of the SFPY programme to the local environment and to evaluate the response of the participants to the intervention, and the likelihood of its success. In this regard, the absence of a control group limits the extent to which any improvements in family functioning observed by facilitators or reported by participants may be indicated as a direct result of the SFPY intervention. In the absence of a control group, attributions to other factors including natural recovery, regression to the mean, or a placebo effect cannot be eliminated (Williams, Chang & Addition Centre Adolescent Research Group, 2000). Any future application of the SFPY programme should include a randomized study which includes a control group to ensure that any particular bias created by the selection process is eliminated.

The absence of follow-up data on the participants also presents a limitation to this study. The timeframe for the completion of the research project, in addition to insufficient human and financial resources did not allow for follow-up. Such information would have been useful in determining the long-term impact of the intervention on the incidence of substance use in the sample group and the level of positive family functioning which is noted as a protective factor in the SFPY intervention. The future expansion of this programme should include short-term and long-term follow-up to identify any issues which may lend to its success or failure, and its impact on participants. Short-term follow-up, for example six-month post intervention, would be particularly useful in assessing the intervention as a preventative treatment and adapting it for subsequent implementation.

Because of the limitations outlined above, the pilot study described is presented as a foundation on which a comprehensive research study could be designed for implementation in the future. Any future research should ensure that the sample size is large and representative of the

adolescent population or the sub-group of interest, and that the study selection and assignment to intervention and control groups is randomized to eliminate biased results. The inclusion of follow- up would also be necessary to ensure reliability and validity of the results.

CONCLUSION AND RECOMMENDATIONS

This paper has presented the process through which the SFPY programme was chosen as an intervention for the prevention and treatment of adolescent drug use. The application of the intervention was described and the evaluation of the pilot project was made through a series of focus groups conducted with the parents, youths and facilitators and through an evaluation of the programme which was built into its application by its developers.

A review of research findings indicated the effectiveness of preventive interventions and the recommendation that such findings should be incorporated into policy agendas to bring about more proactive, constructive efforts to carefully and systematically implement proven family-based preventive programmes. This recommendation is particularly relevant to the Barbados in light of the increasing incidence of drug and substance use in the school population.

The importance of ongoing support after the delivery of preventive intervention programmes for parents should also be incorporated to ensure easy access to relevant community resources by families. This has been cited in the literature as an overlooked aspect of intervention development which needs to be provided to guarantee continuing access to support services after the programme has ended.

The potential of the SFPY programme intervention to positively impact trends in substance use and abuse among the adolescent population is based on its characteristic as theory-based intervention that addresses established risk and protective factors. This is enhanced through the use of appropriate developmental timing; the application of empirically supported skills-training techniques, and effective strategies for engaging families.

The reviewers of outcome studies classified adolescent substance users into four categories ranging from non-users, minimal experimenters, late starters, and escalators (who have a steady increase in substance use from 12 to 18 years). The escalators were shown to have had a history of family and peer problems which are typical for early starting antisocial youth. This classification suggests that preventive interventions would be more effective if they target children and early adolescents to address problem behaviours before they progress to serious comorbid conditions, combining substance abuse and mental health issues with antisocial and deviant behaviour.

The impact of parental involvement in the substance abuse interventions and the differences between parental involvements of male youth participants as opposed to parental involvement of female youth participants are areas that should be examined in a wider implementation of the SFPY programme in Barbados. Such a study may suggest changes in the curriculum to enhance participation of males and their parents. This apparent lack of involvement was discussed in relation to the first pilot project which had only male youth participants. It may be due to a cultural environment where the upbringing of males is generally more permissive than that of females, and this factor may need to be taken into consideration in the delivery of family-based interventions.

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APPENDIX 1

Training Evaluation & Self-Assessment

Please rate your level of agreement on whether the learning outcomes for the training were attained.	5 – strongly agree 4 – agree 3 – neither agree nor disagree 2 – disagree 1 – disagree strongly				
1. I clearly understand the purpose the training.	5	4	3	2	1
2. Training content was valuable.	5	4	3	2	1
3. I can use the information in my work.	5	4	3	2	1
4. Training format was effective (small group, lecture, etc.)	5	4	3	2	1
5. Training materials were helpful.	5	4	3	2	1
6. Instructor was knowledgeable about topic.	5	4	3	2	1
7. Instructor presentation style was effective.	5	4	3	2	1
8. Instructor involved participants in learning activities.	5	4	3	2	1
9. The training delivery method (in the classroom, via the Internet etc.) was appropriate	5	4	3	2	1
10. I am confident enough to provide similar training to my colleagues (given adequate resources).	5	4	3	2	1
11. I am willing to act as a facilitator for the upcoming SFPY Pilot Project.	5	4	3	2	1
12. I wish to be involved in future SFPY Projects.	5	4	3	2	1
13. I am interested in coordinating and facilitating a SFPY programme in my department / organization.	5	4	3	2	1

14. What was the most valuable thing you learned and why?
15. What was of least value to you and why?
16. Additional Comments:

APPENDIX 11

MINISTRY OF HEALTH

Substance Abuse Programme for Children and Adolescents (SAPCA) Pilot Project

Strengthening Families Programme for Youth 11- 16

Referral Form for Intake of Potential Participants

[To be completed by Referring Agency]

1. Referring Agency:	
Name of Referring Officer:	
Occupation:	
Contact Information	Address:
	Phone Number:
2. Youth	
Name:	
Primary Address:	
Contact Numbers:	

(H)	(C)	(W)
Date of Birth:		
Age:		
3. Parent/Guardian		
Name:		
Primary Address:		
Relation to youth participant:		
Contact Numbers:		
(H)	(C)	(W)
Date of Birth:		
Age:		
4. Parent/Guardian		
Name:		
Relation to youth participant:		
Primary Address:		
Contact Numbers:		
(H)	(C)	(W)
Date of Birth:		
Age:		
5. Emergency Contact		
Name:		
Contact Numbers		
Address		

Relation to Youth/Parent
6. Medical Doctor Contact Information
Name
Address
Contact Number
Youth Participant
7. Family History:
Parent Names
Marital Status
Do you have any children?
If so, number and ages
8. Academic History
Schools of Attendance:
Primary
Secondary
Tertiary
Technical/Vocational
Present year level:
Please list present academic qualifications if relevant: CXC

Previous suspension or expulsion? Please detail:
9. Legal History
Any previous involvement with law enforcement agencies, including arrests, incarceration, pending cases within the judicial system?
Please detail:
10. Substance Use
Please detail present or past involvement with substance use.
Alcohol
Marijuana
Cocaine
Crack Cocaine
Ecstasy/MDMA

Benzodiazapines
Huffing/Glue/Inhalants
Prescription Medications
Please detail any substance (drug) use treatment programs that have been done to date.
Please detail the agencies/organizations which have been involved in your care
11. Medical History
Please detail any medical history:
Allergies (food, medication etc)
Asthma
Heart Disease
Mental Illness: including anxiety, depression, ADHD, ODD
Seizure Disorders
Present Medication use
Past Medication use
Previous Hospitalizations

If any of the above please detail further
12. Parent/Guardian Participant
13. Family History:
Marital Status
How many children do you have?
Ages of children
14. Academic History/Employment History
Please list present academic qualifications if relevant: CXC, A levels, Diplomas, Degrees

Are you presently employed? If so, where and what is your occupation
15. Legal History
State any previous involvement with law enforcement agencies, including arrests, incarceration, pending cases within the judicial system?
Please detail;
16. Substance Use
Please detail present or past involvement with substance use.
Alcohol

Marijuana
Cocaine
Crack Cocaine
Ecstasy/MDMA
Benzodiazapines
Huffing/Glue/Inhalants
Prescription Medications
Please detail any substance (drug) use treatment programs that have been done to date.
Please detail the agencies/organizations which have been involved in your care
17. Medical History
Please detail any medical history:
Allergies (food, medication etc.)
Asthma
Heart Disease

Mental Illness: including anxiety, depression, ADHD, ODD
Seizure Disorders
Present Medication use
Past Medication use
Previous Hospitalizations
If any of the above, please detail further

Inclusion Criteria:

1. All youth participants must be between 11 and 16 years of age to be eligible for the program.

2. Youth referred should have a history of involvement in substance use, past or present; this includes reported substance use by primary caretakers or family members of youth, or reported use themselves. In addition, youth and their families identified as 'high risk ' by the referral agency for ongoing or future concerns with substance use are also eligible.

3. All youth participants must reside with the parent(s) or guardian(s) who are attending the program. This is a family based program and **all sessions** must be attended by the youth and parent(s)/guardian(s) who register together. Youth or parent/guardian who arrives for a session without their respective family member will not be allowed to participate.

4. All youth and parents must be fluent English Language speakers.

5. Youth and parents/guardians need to be available to participate in the 9 week program, which comprises weekly sessions each of approximately 3 hours duration.

Exclusion Criteria:

1. Youth who are presently experiencing significant mental or medical illness which precludes them from participating in a program which involves, group interaction, reading, writing and discussions (but not limited to acute psychosis).

2. Youth who by nature of significant developmental, neurological disability or otherwise are unable to read, write and participate in activities which assume a literacy level equivalent to Grade 5/Junior 5 of Primary School.
3. Youth who do not reside with their parent/guardian as their primary address.

APPENDIX 111

Strengthening Families for Parents & Youths

Focus Group

Parents

We have now reached the half-way mark of Pilot Project. The Strengthening Families Programme is designed to help you improve your parenting skills and improve the level of family functioning and also to assist your son/grandson in coping with life and being a responsible member of the family.

1. What would you say is the most important thing that you have learnt since starting this programme?

2. Have you been able to use any of the skills learnt at home?

3. Is there any change in your son/grandson's behavior at home?

4. Do you think that he is easier to talk to?

5. Do you think that the relations at home among family members have improved or gotten worst over the past three weeks?

6. What aspect of the relationship with you and your son/grandson would you like to see improved?

7. Do you think attending the sessions has been helpful? How?

Focus Group

Youths

We have now reached the half-way mark of Pilot Project. The Strengthening Families Programme is designed to help you improve communication with your parents/grandparents and to cope with all the issues that you might face in your family, at school and in the community.

1. What would you say is the most important thing that you have learnt since starting this programme?

2. Have you been able to use any of the skills learnt at home?

3. Do you think that you are better able to understand the concerns that your parent/grandparent/teacher may have in relation to you as a young person?

4. Are you finding it easier to talk to your parent/grandparent and discuss anything that concerns you or anything that you are happy about?

5. Do you think that the relations at home between you and other family members have improved or gotten worst over the past three weeks?

6. What aspect of the relationship with you and your parent/grandparent would you like to see improved?

7. Do you think attending the sessions has been helpful? How?

Focus Group

Facilitators

We have now reached the half-way mark of Pilot Project. The Strengthening Families Programme is designed to enhance communication skills between parents/grandparents and their youths; and to assist the youths in coping with all the issues that you might face them in their family, school and community; and to inform parents/grandparents of the developmental stages and the psychological and physical impact of these changes.

1. Has there been any obvious change in attitude observed among the youths since the start of the programme?

2. Has there been any obvious change in attitude observed among the Parents/grandparents since the start of the programme?

3. Have you observed the parents using any of the communication skills during the sessions?

4. Have you observed the youths using any of the communication skills during the sessions?

5. Do you think that the parents/grandparents are better understanding how the developmental process might be affecting their youths?

Post Project Questionnaire[1]

6. Do you think that the programme was effective generally?

7. What do you think were the main hindrances to the implementation of the programme?

8. What changes would you recommend to improve the delivery of the programme?

9. Did the programme meet your expectations?

[1] Questions 6-9 were administered via e-mail at the conclusion of the Pilot Project

APPENDIX 1V

Strengthening Families for Parents and Youth 12-16 (SFPY)

Parent/Caregiver Questionnaire

Part I

Now that you have completed the SFPY program, please take a little time to tell us how things have been for you and your relationship with your youth since you have attended this program.

Circle the number that best describes how frequently each of the following occurs:		rarely				often
1	I use positive attention (e.g., praise, smile) to show my teen I appreciate what they are doing.	1	2	3	4	5
2	I use my understanding of teen development in my interactions with my teen.	1	2	3	4	5
3	I use *"I feel...when you...because..."* statements to state my feelings.	1	2	3	4	5
4	I listen attentively to my teen.	1	2	3	4	5
5	Our family holds family meetings on a regular basis.	1	2	3	4	5
6	I try to manage my anger and express it in positive ways.	1	2	3	4	5
7	I let my teen know my expectations and standards about the use of alcohol, tobacco and other drugs.	1	2	3	4	5
8	I discuss alcohol, tobacco and other drugs and keeping safe with my teen.	1	2	3	4	5
9	I use clear directions with my teen to let them understand what I expect of them.	1	2	3	4	5
10	I use fair and reasonable consequences with my youth.	1	2	3	4	5
11	I negotiate fair and reasonable limits with my teen.	1	2	3	4	5
12	I am able to relieve stress in a positive way.	1	2	3	4	5
13	I try to be respectful when I am communicating with my teen.	1	2	3	4	5
14	I am able to use the skills I learned in this program to solve problems I am faced with.	1	2	3	4	5
15	I follow the Teen Time guidelines in spending time with my youth.	1	2	3	4	5
16	I feel better about the way our family life is organized.	1	2	3	4	5
17	I try to see things from my teen's point of view.	1	2	3	4	5
18	My teen is doing more chores around the home.	1	2	3	4	5
19	My teen is communicating more respectfully.	1	2	3	4	5

Circle the number that best describes how frequently each of the following occurs:		rarely				often
20	My teen talks about their feelings more.	1	2	3	4	5
21	My teen deals with anger better.	1	2	3	4	5
22	My teen is better at solving problems.	1	2	3	4	5
23	My teen communicates better with myself and others.	1	2	3	4	5
24	My teen follows directions better.	1	2	3	4	5
25	My teen talks to me about alcohol, tobacco and other drugs.	1	2	3	4	5

Part II

Now let us know what you thought of the program.

Circle the number that best describes your agreement or disagreement with each statement:		disagree				agree
1	Overall, I like the SFPY program.	1	2	3	4	5
2	The handouts helped me understand the program content better,	1	2	3	4	5
3	This program has made a difference in my life.	1	2	3	4	5
4	This program has made a difference in my teen's life.	1	2	3	4	5
5	Communication between me and my teen has improved.	1	2	3	4	5
6	I think my teen liked the program.	1	2	3	4	5
7	I can see positive changes in my teen's behaviour since starting this program.	1	2	3	4	5
8	I can see positive changes in some of the ways I interact with my teen since starting this program.	1	2	3	4	5
9	The group leaders helped me to understand the program.	1	2	3	4	5
10	The group leaders helped me to use the program at home.	1	2	3	4	5
11	I would recommend the program to other parents.	1	2	3	4	5
12	I felt I belonged in this group.	1	2	3	4	5
13	The group leaders encouraged all family members to participate in the family group's discussions and activities.	1	2	3	4	5
14	I felt comfortable speaking and participating in the group.	1	2	3	4	5
15	I felt the topics discussed were important.	1	2	3	4	5
16	The group leaders followed an organized session plan each week.	1	2	3	4	5

Part III

Some final questions about the program.

	Circle the number that best describes your agreement or disagreement with each statement:	disagree				agree
1	I learned effective parenting skills (positive approach, less critical, family meetings).	1	2	3	4	5
2	I have improved my communication skills.	1	2	3	4	5
3	I understand teens more.	1	2	3	4	5
4	My family has increased its quality time together.	1	2	3	4	5
5	My family is closer, more respectful.	1	2	3	4	5
6	I learned a lot from the topics and homework.	1	2	3	4	5
7	I enjoyed being with other families with similar issues.	1	2	3	4	5

Part IV

1 The things I liked BEST about the program:

2 The things I liked LEAST about the program:

3 Other comments:

Thank you for your feedback.

APPENDIX V

Strengthening Families for Parents and Youth 12 – 16 (SFPY)

Youth Questionnaire

Now that you have completed the SFPY program, please take a little time to tell us how things have been for you and your relationship with your parents since you have attended this program.

1. Circle the number that best describes how much you agree or disagree with each statement:

Since we have been in the program:	disagree				agree
1. I feel more accepted at home	1	2	3	4	5
2. My parent(s) make(s) more effort to support me	1	2	3	4	5
3. I feel my place in the family is recognized	1	2	3	4	5
4. My parent(s) is/are less critical of me	1	2	3	4	5
5. My parent(s) praise(s) me more	1	2	3	4	5
6. I feel I really belong in my family	1	2	3	4	5
7. My parent(s) make(s) their expectations of me clearer	1	2	3	4	5
8. I think my parent(s) has/have really tried to change	1	2	3	4	5
9. I appreciate the effort my parent(s) has/have made coming here	1	2	3	4	5
10 My parent(s) and I get along better	1	2	3	4	5

2. Now let us know what you thought of the program.

		disagree				agree
1	Overall, I liked the SFPY program.	1	2	3	4	5
2	I learned things that are helpful.	1	2	3	4	5
3	Communication between me and my parents has improved since being in the program.	1	2	3	4	5
4	I can see positive changes in some of the ways I interact with my parents since starting this program.	1	2	3	4	5
5	I would recommend the program to other kids.	1	2	3	4	5
6	I felt I belonged in this group.	1	2	3	4	5
7	I felt comfortable speaking and participating in the group.	1	2	3	4	5
8	I felt the topics discussed were important.	1	2	3	4	5

3. The things I liked **BEST** about the program:

4. The things I liked **LEAST** about the program:

5. Other comments:

Thank you for your feedback