EFFICACY OF LONG-TERM AND SHORT-TERM RESIDENTIAL SUBSTANCE

ABUSE TREATMENT MODALITIES

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EFFICACY OF LONG-TERM AND SHORT-TERM RESIDENTIAL SUBSTANCE ABUSE TREATMENT MODALITIES

John Robert Burgess, III

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EFFICACY OF LONG-TERM AND SHORT-TERM RESIDENTIAL SUBSTANCE

ABUSE TREATMENT MODALITIES

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VITA

John Robert Burgess, III, son of John and Elizabeth Burgess, was born June 7th, 1978, in Montgomery, Alabama. He attended primary school in Auburn, Alabama and graduated from Auburn High School in 1996. He then entered Auburn University and majored in Business Administration receiving a Bachelor's of Science degree in August 2002. Upon completion of his Master of Science in Rehabilitation Services, he is expected to graduate in December 2005.

THESIS ABSTRACT

EFFICACY OF LONG-TERM AND SHORT-TERM RESIDENTIAL SUBSTANCE ABUSE TREATMENT MODALITIES

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The overall purpose of this study was to examine the efficacy of two drug treatment modalities: (1) long-term residential treatment extended care and (2) short-term residential treatment and their effectiveness in serving individuals with substance dependence. There are many issues involving client treatment retention, but for this study length of stay in treatment was the primary component when defining efficacy. Success was defined as having achieved abstinence for one or more continuous years.

Data collection was accomplished by telephone interviews to former clients of the St. Christopher's Residential Treatment Programs (Baton Rouge, LA) by staff members of the programs.

In order to investigate the efficacy of long-term and short-term treatment, former clients of the St. Christopher's program were administered questionnaires to evaluate

long-term and short-term treatment effectiveness. Approximately 50 former long-term and 50 former short-term clients (n = 100) were contacted for participation in this study; however, 20 former long-term and 10 former short-term clients (n = 30) were available for interview at the time of data collection.

Results of this study demonstrated a positive correlation between length of time spent in treatment and continued abstinence from drugs and/or alcohol. The more time spent in treatment yielded higher rates of sobriety than shorter time periods spent in the St. Christopher's program.

Findings from this research will help to substantiate the importance of long-term treatment for individuals consistent with the diagnostic criteria for substance dependence patterns. Additional research is needed in the field of substance abuse treatment to identify alternative methods in serving the needs of people seeking rehabilitation for addiction.

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I. INTRODUCTION

The length of time spent in treatment has historically been one of the most reliable predictors of sobriety for those persons who have undergone treatment for substance abuse (Hubbard et al., 1989; Sells & Simpson, 1980; Simpson & Sells, 1982). Research has indicated that long-term residential substance dependence treatment modality has higher rates of success than that of short-term residential or outpatient treatment modalities.

Throughout the years, long-term treatment has proven effective in the maintenance of sobriety. The Drug Abuse Treatment Outcome Study (DATOS), the most recent long-term study on drug treatment outcomes, demonstrated that those who successfully completed residential treatment had lower levels of cocaine, heroin, and alcohol use; criminal behavior; unemployment; or depression than prior to residential treatment (National Institute on Drug Abuse, 2005).

This study evaluates the treatment effectiveness of St. Christopher's Residential Treatment Program, located in Baton Rouge, Louisiana. This study seeks to determine characteristics unique to this program relative to effective substance abuse treatment. The correlation between treatment modalities most effective in serving the lives of those with substance dependence will be analyzed.

Statement of the Research Problem

Evaluating the effectiveness of a drug abuse treatment program involves understanding many facets of the treatment modality. However, few studies have been conducted which evaluated the efficacy of substance abuse treatment based on length of stay. Many of those which are in circulation are outdated and cover too broad an area to determine whether or not length of stay is a predictor of long-term abstinence. Therefore, there is a need to examine whether or not length of stay in treatment is, indeed, a likely forecaster in long-term success.

Purpose of the Study

The overall purpose of this study is to examine which drug treatment modality is most relevant in serving the needs of individuals with substance dependence diagnosis. The study will examine the efficacy of two drug treatment modalities: 1) long-term residential treatment extended care, and 2) short-term residential treatment and its effectiveness in serving individuals with substance dependence. Each modality has been proven effective in its own respect; however, each modality has strengths and weaknesses which should be examined. There are many issues involving client treatment retention, but for this study length of stay is the primary component when defining efficacy of treatment modalities.

Research Questions

1. What are the demographic characteristics of individuals with a substance dependence diagnosis participating in the study?

2. Based on length of time spent in treatment, which drug treatment program is most effective in long-term abstinence?

3. What additional characteristics (graduation rate, relapse prevention, etc.) contribute to a positive drug treatment outcome?

Significance of the Study

The results from this study may provide a more precise definition of drug treatment that is most effective in serving the needs of individuals with clinically diagnosed drug addictive behaviors. This information will contribute to the literature in the field of substance dependence treatment by allowing researchers to view length of treatment as a substantial factor in the maintenance of sobriety for participants who seek drug treatment.

Limitations and Assumptions

Data analyzed in this study is from only one treatment center; consequently results from this study may not be generalized to individuals outside the St. Christopher's program of residential treatment. Because the data was collected from self-reported questionnaires of former clients of the St. Christopher's program, one must be aware of the possibility that former clients may have provided answers which were socially desirable. Because individuals were selected from one treatment program, this sample may not be entirely representative of all treatment programs. An assumption made is that individuals who participated in this study provided concise, truthful statements of their current state of sobriety and other factors included in the questionnaire.

Definition of Terms

Addiction: The continued use of a substance despite having a knowledge that the addiction is causing problems with physical health, financial matters, vocational endeavors, legal problems, social and relationships with others.

Inpatient Treatment: Rehabilitation treatment which typically keeps patients up to 30 days. Most of these programs focus on medical stabilization, abstinence, and lifestyle changes. Staff members are primarily medical professionals and trained substance abuse counselors. Once primarily established for alcohol abuse, these programs expanded into drug abuse rehabilitation programs in the 1980s (The Treatment Directory, 2005).

Residential Treatment: Rehabilitation treatment provides around-the-clock, drug-free treatment services in a residential drug rehabilitation community of counselors and fellow recovering addicts. Patients, adults, or adolescents usually stay in these programs several months or up to a year or more. Some programs are referred to as therapeutic communities, drug rehabilitation, or drug and alcohol rehabilitation centers (The Treatment Directory, 2005).

Substance Abuse: The excessive use of a drug leading to a multitude of physical, mental, and emotional impediments.

Substance Dependence: The excessive use of a drug(s) leading to behavioral and physiological symptoms that indicate the continual, compulsive use of a substance despite problems related to the use of this substance. Withdrawal symptoms are present when the drug(s) is not available.

Successful Treatment Outcome: Abstinence from mind altering substances for one or more continuous calendar years.

Treatment: A program of intervention and recovery for individuals who are unable to stop the use of alcohol or drugs without professional assistance.

Summary

The social and psychological effects of drugs and alcohol on the community are a financial burden but also affect the vast majority of all society. In a day and time when nearly 150 million Americans are consuming drugs and alcohol on a regular basis, the United States is experiencing a social epidemic of mammoth proportions. Individuals needing drug treatment is at an all time high. It is essential that people who desire sobriety are granted the opportunity to pursue such treatment. Identifying effective drug treatment modalities that works is the purpose of this study. Effective drug treatment has the ability to improve the lives of millions of person and influence positive change in the world.

In the following chapter, a review of existing drug treatment modalities will be presented.

II. REVIEW OF LITERATURE

Substance abuse is one of humanity's oldest problems (Dowd & Rugle, 1999). From the hallucinogenic, religious experiences of the ancient Greeks to Jesus turning water into wine, mood altering substances have had a place in this world. Greco-Roman philosophers long ago called for moderation and condemnation of bacchanalian excess just as our society has similarly become concerned with the overconsumption of alcohol, drugs, food, and gambling (DiClemente, 2003). Society has historically placed blame on the individuals who overindulge and has condemned them as weak-willed people, lacking in common moral, civic and religious virtues (Dowd & Rugle, 1999).

Because of a predisposition to overindulge, society is now faced with an epidemic of great proportions. Many of the substances abused today carry a life- threatening penalty; many of these individuals will need to seek some form of rehabilitation to overcome their addiction. Identifying the treatment modality that is most effective is something which can no longer be delayed.

Evaluating the effectiveness of a drug abuse treatment program involves understanding many facets of the treatment modality. The need for efficient treatment is something which we, as Americans, can no longer defer to another day or time. Drug dependence results in thousands of lives being tormented and forever changed (National Research Council and Institute of Medicine, 2004). Be it an alcohol-related automobile

accident, a heroin overdose, or a death related to exhaustion from an amphetamine binge, this epidemic is killing people in hoards, many of whom have never stepped foot inside a treatment facility. Along with quantifying what is or is not an effective treatment modality, one must first understand the facts about the drug and alcohol dilemma which have permeated our society as a whole.

Prevalence and Magnitude of Substance Use and Dependence

The National Survey on Drug Use and Health (NSDUH) is the primary source of statistical information on substance dependence in the U.S. population. NSDUH collects information from residents in households, non-institutional group quarters (shelters, dormitories), and those living on military bases. The NSDUH sample is representative of almost 98 percent of the U.S. population aged 12 years old and above (Substance Abuse and Mental Health Services Administration, 2003).

In 2002, the NSDUH estimated that 22 million Americans aged 12 or older were classified with substance dependence or abuse (9.4 percent of the total population). Of the 22 million people who met abuse/dependence criteria, roughly 11.5 million of them were deemed substance dependent. Of these, 6.9 million were classified with alcohol dependence; 3.3 million were classified with illicit drug dependence; and 1.3 million were classified with a dual diagnosis of dependence on both alcohol and illicit drugs (Substance Abuse and Mental Health Services Administration, 2003).

NSDUH collects information on nine different categories of illicit drug use: 1) marijuana, 2) cocaine, 3) heroin, 4) hallucinogens, 5) inhalants, 6) pain relievers, 7) tranquilizers, 8) stimulants, and 9) sedatives. In 2002, marijuana was the most commonly

used illicit drug, with 14.6 million current users; followed by 4.4 million users of pain relievers; 2 million cocaine users, 1.8 million tranquilizer users; 1.2 million stimulant users; 1.2 million hallucinogen users; 400,000 sedative users; and 166,000 heroin users.

According to the Substance Abuse and Mental Health Services Administration (2004), an estimated 19.5 million Americans (8.1% of the general population) were illicit drug users and 119 million Americans were current alcohol drinkers (50% of the general population). Untreated addiction costs America close to $400 billion per year and contributes to nearly 20% of all Medicaid hospital costs; nearly $1 of every $4 Medicare spends on inpatient hospital care has an association with substance dependence (Horgan, 2001). Additionally, the United States Department of Labor (2005) estimates that alcoholism alone causes more than 500 million lost work days per year.

Substance dependence is on the rise in every sector of our nation. Nearly 10% of the American population is either dependent upon or abusive of alcohol or drugs. In 2003, an estimated 21.6 million Americans aged 12 or older were noted to have a substance dependent diagnosis.

According to Fuller and Hiller-Sturmhofel (1999), more than 700,000 people receive alcoholism treatment per day; this is a time when approximately 14 million Americans are dependent on alcohol. Due to the rising costs of healthcare, the trend in treatment for alcoholism and drug addiction has shifted from inpatient stays to outpatient programs. The time spent in treatment has been drastically reduced because of this shift.

One in five (21%) young adults aged 18–25 are dependent on or abuse alcohol and drugs, while 7% of those 26 years old and above either abuse or are dependent on alcohol or drugs (Substance Abuse and Mental Health Services Administration, 2004).

Not only are we as a nation becoming more chemically dependent but future generations are also beginning to follow this trend. In 2003, 9% of youths aged 12 to 17 were classified with a diagnosis of substance dependence or substance abuse (Substance Abuse and Mental Health Services Administration, 2004). While this number is alarming, it should be no surprise as more than 9 million children live with a parent who either depends upon or abuses alcohol or illicit drugs (The National Council on Alcohol and Drug Dependence, 2005).

Definition of Substance Use, Abuse, and Dependence

Substance abuse and dependence is an epidemic. This epidemic does not discriminate on the basis of race, culture, educational, or socioeconomic status and disrupts the lives of those involved in this behavior as well as family members and loved ones. Substance dependence has been defined medically as a group of behavioral and physiological symptoms that are characteristic of the compulsive use of a substance despite the problems related to the use of that particular substance (Carson-Dewitt, 1999).

According to Schuckit (1994), substance dependence is a condition in which the consumption of alcohol and drugs has become such a central element in the addict's life that he or she will give up many of life's meaningful activities to continue on a trail of addiction, neglecting what once was most important in his or her life in favor of substances. Depending on whom you ask, scientific models for explaining these behaviors and understanding these addictions are relatively new, most existing over the past 100 years. There is a need to treat these behaviors in both an efficient and effective manner.

Dowd and Rugle (1999) state, currently substance dependence in all of its manifestations is one of the major public health concerns facing the United States. Many researchers classify substance use, abuse and dependence in the same category. According to Goldstein (1994) dependence, which typically is related to tolerance, is not the effect the drug has on the addict; rather, it is the observed actions of the addict when he or she is in the absence of the drug(s).

DiClemente (2003) provides some insight into this nationwide epidemic through a poster titled “The Typical Alcoholic American” produced by the National Institute on Alcohol Abuse and Alcoholism in the late 1970s. Pictured in the photograph are approximately 20 individuals differing in age, sex, race, occupation, socioeconomic status, etc. Included in the diagram are pictures of doctors, lawyers, construction workers, housewives, an American Indian, and others. The purpose of the poster is to illustrate that there is no typical alcoholic and that common stereotypes of substance abusers/addicts do not exist.

According to the Substance Abuse and Mental Health and Human Services Administration (2003), an estimated 21.6 million Americans were classified with substance dependence or abuse. This equals 9.1 percent of the total U.S. population aged 12 or older. Of this population, 3.1 million were classified with dependence on or abuse of both alcohol and illicit drugs, 3.8 million were dependent on or abused illicit drugs but not alcohol and 14.8 million were dependent on or abused alcohol but not illicit drugs. Between 2002 and 2003 there was a slight change of dependent individuals from 22 million in 2002 to 21.6 million in 2003 (Substance Abuse and Mental Health Services Administration, 2004).

Gossop (2003) stated that the term “dependence” was first introduced as an alternative to “addiction” by the World Health Organization. Gossop proposes that dependence occurs as part of a broader pattern of human behavior which includes various cognitive, behavioral, and physiological effects. These effects consist of: (a) a feeling of compulsion to take drugs, (b) a desire to stop taking drugs, (c) a relatively stereotyped pattern of drug taking, (d) signs of tolerance and withdrawal symptoms, and (e) the salience of drug-taking behavior relative to other priorities and the tendency to return to drug taking soon after a period of abstinence (Gossop, 2003).

The Diagnostic and Statistical Manual-IV-TR (APA, 2000, pp. 197–198) defines substance dependence as:

> A maladaptive pattern of substance use, leading to clinically significant impairment or distress, as manifested by three (or more) of the following, occurring at any time in the same 12-month period:
>
> 1. tolerance, as defined by either of the following:
>   - a need for markedly increased amounts of the substance to achieve intoxication or desired effect;
>   - markedly diminished effect with continued use of the same amount of substance;
> 2. withdrawal, as manifested by either of the following:
>   - the characteristic withdrawal syndrome for the substance;
>   - the same (or a closely related) substance is taken to relieve or avoid withdrawal symptoms;

3. the substance is often taken in larger amounts or over a longer period than was intended;
4. there is a persistent desire or unsuccessful efforts to cut down or control substance use;
5. a great deal of time is spent in activities to obtain the substance (e.g., visiting multiple doctors or driving long distances), use the substance (e.g., chain-smoking), or recover from its effects;
6. important social, occupational or recreational activities are given up or reduced because of substance use; and
7. the substance use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance (e.g., current cocaine use despite recognition of cocaine-induced depression, or continued drinking despite recognition that an ulcer was made worse by alcohol consumption.

The first two symptoms in the above classification (tolerance and withdrawal) indicate permissiveness and consequent physiological dependence. The next two symptoms indicate impaired control of substance use. The final three symptoms indicate the salience of persistent or continued drug use to the person. A preoccupation with seeking, obtaining, or controlling the substance use pattern in question is exhibited by the addict (Schottenfeld, 1994). When classifying an individual with substance dependence, the DSM-IV-TR states that it is necessary to classify the individual as either with or without physiological dependence. For an individual to exhibit physiological dependence, he or she must present evidence of tolerance or withdrawal. If tolerance or withdrawal is

not present, the individual is deemed to be substance dependent without physiological dependence (APA, 2000). DiClemente (2003) adds that dependence is a pattern of behavior involving poor self-regulatory control which continues despite negative feedback.

Much like the DSM-IV's criteria for dependence, the International Classification for Diseases-10 (ICD-10) states that three or more of the following symptoms must be experienced or exhibited at some time during the previous year of assessment to classify one as substance dependant. They include:

1. A strong desire or sense of compulsion to take the substance.
2. Difficulties in controlling substance-taking behavior in terms of its onset, termination, or level of use.
3. A physiological withdrawal state when substance use has ceased or been reduced, as evidenced by the characteristic withdrawal syndrome for the substance or use of the same (or closely related) substance with the intention of relieving or avoiding withdrawal symptoms.
4. Evidence of tolerance that requires increased doses of the psychoactive substances in order to achieve effects originally produced by lower doses.
5. Progressive neglect of alternative pleasures or interests because of psychoactive substance use, or increased amounts of time necessary to obtain, take, or recover from the substance's effects.
6. Persistence in the use of the substance despite clear evidence of harmful consequences, such as harm to the liver through excessive drinking,

depressive mood states consequent to periods of heavy substance use, or drug-related impairment of cognitive functioning.

According to the *Merck Manual of Medical Information* (1997, p. 440), "addiction is the compulsive activity and overwhelming involvement with a specific activity." Moreover the Merck Manual notes that "a single definition for drug dependence is neither desirable nor possible" (Beers & Barkow, 1999).

Drug dependence, according to the *Merck Manual*, involves either psychological dependence or both psychological and physical dependence. Psychological dependence is an individual's choosing to take a drug based on its effect; either to increase mental and physical capabilities, to reduce anxiety and depression, or to cause other pleasurable mood changes. Because psychological dependence is relative to how the individual feels, physical dependence is based on how the body adapts to the drug when it is used on a regular basis. Often physical dependence leads to tolerance and withdrawal symptoms, which cause the dependent person much anguish (Beers & Barkow, 1997).

In the United States, the term *drug abuse* refers to dysfunctional and maladaptive behavior, but not to dependence brought on by the use of drugs (Beers & Barkow, 1997, p. 440). According to Beers and Barkow (1997), drug abuse is often the recreational use of illegal drugs and the use of legal drugs to relieve problems or symptoms in ways not intended by the prescribing doctor, resulting in the use of drugs to the point of dependence. According to Juhnke (2002), substance dependence diagnosis preempts the substance abuse diagnosis. Hence, those having the more severe DSM-IV-TR substance dependence diagnosis cannot parallel the less severe substance abuse diagnosis.

Schottenfeld (1994) cites that substance abuse is the diagnosis for noting maladaptive or problematic patterns of substance use which have not yet matched the criteria for substance dependence (p. 26). According to Carson-Dewitt (1999), substance abuse is a pattern of use which displays adverse results from continued use of a substance. Substance abuse is a continued, compulsive use of substances despite personal, social, and physical problems caused by substance intake. Abuse is likely the predecessor of dependence, where increased amounts of the substance are needed to attain the desired effect or the individual's tolerance for the substance increases (Ford-Martin, 2001). The central corresponding theme within a substance abuse diagnosis is a maladaptive substance use pattern with occurring and reoccurring distressing consequences (Juhnke, 2002, p. 17).

Substance abuse can be viewed as a means to change a psycho-physiological state from one of less comfort to one of more comfort (L'Abate, Farrar, & Serritella, 1992, p. 84). Much like this definition, the DSM-IV-TR (APA, 2000, p.199) defines substance abuse as:

1. A maladaptive pattern of substance use leading to clinically significant impairment or distress, as manifested by one or more of the following, occurring within a 12-month period:
    a. Recurrent substance use resulting in a failure to fulfill major role obligations at work, school, or home (e.g., repeated absences or poor work performance related to substance use; substance related absences, suspensions, or expulsions from school; neglect of children or household);

b. Recurrent substance use in situations in which it is physically hazardous (e.g., driving and automobile or operating a machine when impaired by substance use);

c. Recurrent substance-related legal problems (e.g., arrests for substance-related disorderly conduct);

d. Continued substance use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of the substance (e.g., arguments with spouse about consequences of intoxication, physical fights).

2. The symptoms have never met the criteria for Substance Dependence for this class of substance.

"The central defining elements of substance dependent behaviors involve the compulsive and out of control nature of current behavior patterns and the level of difficulty encountered in changing them" (DiClemente, 2003, p. 5). According to Gossop (2003), drug users who seek treatment rarely confine their drug taking to just one substance; often conglomerations of substances go into the make-up of one who is substance dependent.

Marlatt and Barrett (1994) report that addictive behaviors include acts which lead to a state of immediate reward. As with many addictive behaviors, especially with substance abusers, the experience of immediate reinforcement (the "high" or relief associated with the act itself) is often followed by negative consequences. These consequences range from social disapproval to financial loss to decreased self-esteem.

Drug addicts will often go to any necessary means to acquire their drug of choice, regardless of the consequences. People with addictive disorders represent a heterogeneous group with individual risk factors as well as individual sources of resilience (Ott, Tarter, & Ammerman, 1999, p. ix). According to Carson-Dewitt (1999), addiction refers to the state of mind a person arrives at when he or she must have a particular substance, even though the social consequences of using the substance(s) are identifiably negative. Usually at this stage of dependence the individual comes to the realization that a drug problem exists, and he or she will either attempt to change the behavior or continue on the cycle of addiction. Often when the addict reaches this stage of dependence, drug treatment is necessary to ensure the addict's transition to normal society.

Historical Perspectives of Treatment

The availability of treatment services for substance dependent individuals in the United States is a relatively new concept. The early 20th century measures taken by the federal government via the Pure Food and Drug Act of 1906 proved an effective means of curtailing addiction during this time period. This legislation formed the Food and Drug Administration (FDA), which was given the sole responsibility of regulating food and drug consumption by the public. Addiction in the United States, as we know it, decreased considerably (Goode, 1999). However, as evidenced by the 1916 Harrison Act, the United States has historically favored policies that include a zero tolerance mindset. Governmental efforts such as "a Drug Free America" and "The War on Drugs" have been

proven ineffective and suggest that policy makers have been mostly reliant on such measures to discourage or control the use of substance dependence (Gossop, 2003).

In the mid-1920s, the Supreme Court ruled that drug addiction was an illness and declared that narcotic drugs could be used in treatment as long as they were part of a program aimed at curing the addiction, thus reversing its position of a few years earlier (Platt, Kaplan, & McKim, 1990). During the late 1920s, approximately one-third of the federal prison population was incarcerated for drug violations.

By the 1930s with the passage of medico-legal initiatives and the supervision of the Public Health Service, work farms, doubling as hospitals for drug addicts, were developed to relieve the burden which was being placed on the prison system. At these farms, which were located in Fort Worth, Texas, and Lexington, Kentucky, two-thirds of the admissions were criminal justice referrals and the remaining one-third were voluntary admissions. Aside from these two treatment centers, there were no facilities specializing in drug treatment (Berger, 1992, p. 81).

The next thirty years of federal drug policy continued to be primarily control-oriented. The Marijuana Tax Act of 1937 and the Food, Drug, and Cosmetic Act of 1938 established new meanings for the way in which drugs were defined. The FDA was given sole reign over drug safety by the later act. Both the Narcotic Drug Control Act of 1956 and the Drug Abuse Control Amendments of 1965 attempted to fix the problem and scare society by attaching severe penalties for narcotic violation (Goode, 1999). Substance dependence was on the rise and apparently it was here to stay.

"In 1935, the grassroots founding of Alcoholics Anonymous (AA) was launched and provided the first effective intervention for alcoholism" (Adinoff, Scannell, Carter, &

Dohoney, 1999, p. 373). Closely following the structure of AA, the Minnesota model was begun and provided what today is considered the evolution of substance abuse treatment.

When substance dependence treatment programs were first conceived, treatment relied primarily on the Minnesota model prototype, which often included a standardized, fixed-length residential treatment modality and ranged in time from several days to several weeks, later evolving to include long-term therapeutic community modalities (Galanter & Kleber, 1994). According to Adinoff, Scannell, Carter, and Dohoney (1999), the Minnesota model gained acceptance with its use of group therapies, utilization of "recovering" addicts and alcoholics as counselors, multi-professional staff, family counseling, and 12-step programs. Similar to AA, facilities that employed this approach, first appeared at the Pioneer House (1948), Hazelden (1949) and Willmar State Hospital (1951).

In 1962, a declaration of the Supreme Court stated that addiction was a disease, psychological or physical disorder. This decision debunked the myth that addiction was merely a crime. This, in turn, led to an amendment to the 1963 Community Mental Health Center Act which allowed public funding of community programs for addiction. The Narcotic Addict Rehabilitation Act (1966), states that people who are convicted of violating Federal criminal laws and are determined to be addicted, should be allowed treatment instead of mandatory imprisonment (Platt, Kaplan, & McKim, 1990).

In 1958, Synanon, the first therapeutic community for people diagnosed with substance dependence, was introduced in Santa Monica, California. This program primarily relied upon the philosophical principles of Alcoholics Anonymous (AA) and rejected much of American culture outside of the therapeutic community. However,

several years later, with the inauguration of communities such as the Phoenix House and Gateway Foundation, the recovering addict's reintegration into society was encouraged.

According to Platt, Kaplin and McKim (1990), the Drug Abuse Office and Treatment Act of 1972 and the Omnibus Budget Reconciliation Act of 1981 established that there were many differences relating to trends of drug dependence in the United States. This legislation said that substance dependence treatment should be geared not only to the types of drugs abused but also to the patterns in which these drugs are abused, the demographic and social characteristics of the substance abuser, and resources available for treatment. This bill was the first of its kind to recognize the growing need for substance dependence treatment and gave state and local agencies the power to provide individualized treatment. This Act established federally funded programs for substance dependence prevention and treatment. These practices were later extended by the 1974 and 1978 Drug Abuse Treatment and Control Amendments.

Simpson (1993) indicated that community treatment programs for substance dependence did not really begin to materialize until these amendments provided federal monies specifically for drug abuse. Before the passage of these laws, treatment was available only for criminals in the Lexington and Fort Worth federal prisons. Hence, few addicts that needed treatment received any help with their condition. The early 1970s marked the beginning of substance dependence treatment facilities as we know them now.

Objectives and Expectations for Drug Rehabilitation

According to Carson-Dewitt (1999), treatment has a multitude of goals. Treatment can help a person deal with the uncomfortable and possibly life-threatening symptoms associated with their substance dependence, aid in assisting the addict with the social effects from substance dependence, and promote the acquisition of strategies of prevention to confront chemically induced relapse.

According to the National Institute on Drug Abuse (NIDA, 2005), the ultimate goal of drug abuse treatment is to enable the dependent individual to maintain lasting abstinence, the most widely used measure of clinical effectiveness. Moreover, the Executive Office of the President (1996) states that abstinence is the refraining from all mood-altering substances which produce a change in an individual's current state of being.

Treatment, according to NIDA, should be tailored to the individual needs of the person to aid in the addicts' learning to control their present condition and live normal, productive lives (National Institute on Drug Abuse, 2005). Currently, there are about 11,000 specialized drug abuse treatment programs in the United States. While 11,000 programs appear to be a large number, this number pales in comparison to the problem, particularly since drug abuse/dependence is on the increase (Sorensen, Rawson, Guydish, & Zweben, 2003).

Review of Treatment Modalities

Drug abuse treatment is provided in distinct program settings, each having arisen from and being inseparably tied to distinct philosophical traditions and treatment

orientations. Over the past 30 years, these settings have evolved as major treatment modalities (Etheridge, Hubbard, Anderson, Craddock, & Flynn, 1997, p. 244). According to Etheridge et al. (1997), the major modalities of drug treatment have significantly changed in both structure and approach since their inception in the 1960s.

Moreover, the setting for alcohol and drug treatment has significantly changed in the past two decades. In the 1980s and early 1990s, the principal treatment modality typically consisted of a 28-day inpatient stay. Currently, most treatment programs only provide inpatient treatment for 3–14 days, followed by a variation of outpatient treatment services. Both the 28-day and outpatient programs have been determined more by financial considerations than with empirically based research (Adinoff, Scannell, Carter, & Dohoney, 1999).

According to Fletcher, Tims and Brown (1997), research has shown that existing behavioral, psychosocial, and pharmacological treatments can effectively reduce drug use and help manage drug dependence and addiction. According to Gossop (2003), the behaviors underlying substance dependence are the most frequent reasons for drug users to seek treatment. In their research pertaining to treatment types, Finney, Hahn, and Moos (1996) found that outpatient treatment is most suitable for those with a social network suitable for recovery and for those lacking serious mental and/or medical conditions. Residential rehabilitation treatment programs should be the treatment method desired for those without a strong recovery environment and with serious mental and/or medical conditions.

In many countries, residential rehabilitation treatment programs are the most predominant forms of treatment modalities to date. Residential forms of treatment are

programs aimed at supporting the substance dependent individual primarily through abstinence and social stability, with the main goal of treatment being to shorten the course of the addict's dependence as early as possible (Berglund, 2003).

According to the Substance Abuse and Mental Health Services Administration (Substance Abuse and Mental Health Services Administration, Office of Applied Studies, 2004) long-term residential treatment is defined as treatment that lasts more than 30 days. It does not include detoxification or residential treatment of less than 30 days. Short-term residential treatment is defined as treatment that lasts no more than 30 days. The rising popularity of the 28-day program can be attributed to its early financial success for treatment programs. As public awareness of substance dependence increased and insurers and company programs provided economic incentives for programs of lesser duration, the demand for these programs peaked in the early 1980s (Adinoff, Scannell, Carter, & Dohoney, 1999, p. 374)

Long-Term Residential (LTR) and/or extended care programs include traditional therapeutic communities, modified therapeutic communities, and other programs requiring residential treatment, generally lasting nine months or longer. Short-Term Inpatient (STI) programs generally kept clients in-residence for up to 30 days, with a focus on medical stabilization, abstinence, and lifestyle changes. They include free-standing non-profit and for-profit short-term programs, public and non-profit hospital programs, and county-managed programs (The Drug Abuse Treatment Outcome Studies, 2001).

According to NIDA, there are several types of drug dependence treatment programs which are effective. Short-term treatment programs tend to last less than six

months and include residential therapy, medication therapy, and drug-free outpatient therapy. Long-term treatment generally lasts more than six months and includes methadone maintenance outpatient treatment and residential therapeutic community treatment (NIDA, 2005).

Short-term residential programs are often based on the Minnesota Model of treatment and involve a three to six week inpatient treatment plan followed by participation in a 12-step group. Alcoholics Anonymous, Narcotics Anonymous, and Rational Recovery serve as models for recovery once the addict has successfully completed any given treatment modality (NIDA, 2005). According to Etheridge et al. (1997) short-term inpatient programs are derived from a blend of the Alcoholics Anonymous society and the Hazelden Treatment Center model which served as the first in-patient delivery system dealing with chemical dependency.

According to NIDA, the most reputable of all long-term treatment modalities is the therapeutic community. Therapeutic communities (TCs) serve as highly structured substance dependence programs ranging in length of stay from six to twelve months. The primary focus of the TC is introducing the individual into a drug-free, crime-free lifestyle. Often individuals residing in TCs have long histories of drug dependence, criminal association, and social functioning deficits (NIDA, 2005).

According to De Leon (1999, p. 323) what distinguishes the therapeutic community from other treatment approaches is the purposive use of the peer community to facilitate social and psychological change in individuals. Therapeutic communities are highly structured, residential treatment programs which promote recovery by having

addicts and alcoholics live in the same setting. Hence, the community is both the context in which change occurs and the method for facilitating the change.

Human and Monetary Costs of Substance Dependence

There is evidence that substance abuse treatment is both behaviorally effective and cost effective. Drug dependence costs our economy nearly $100 billion per year in crimes and imprisonment, reduced occupational productivity, and treatment costs for those affected. The economic benefits of drug abuse treatment — including more employment, less crime, and less need for expensive medical care — have been known for decades (Sorensen, Rawson, Gudyish, & Zweben, 2003).

Estimating the total cost of substance disorders is difficult because such disorders impact both the lives of the substance abusers and their families as well as the communities in which they live (Mojtabai & Zivin, 2003). Scanlon (2002) reported that in 1995, the estimated social cost of substance abuse in the United States was $276 billion. According to Dowd and Rugle (1999), drug-related illness, death and crime cost the United States nearly $70 billion. As a society, every person in our country pays an estimated $1,000 annually to cover the cost of unnecessary health care, additional law enforcement, automobile accidents, and lack of occupational productivity resulting from substance abuse.

The California Drug and Alcohol Treatment Assessment (CALDATA) study estimates that every $1 invested in substance abuse treatment has returned $7 in cost savings from a reduction in health care costs, crime rates, and occupational productivity loss. In the CALDATA study, participants' illegal drug use dropped by 40%; their

hospitalization rates dropped by a third; and overall criminal activity dropped by two-thirds after successful treatment completion (Dowd & Rugle, 1999).

The Institute on Medicine states that residential treatment costs approximately $12,500 per person, the cost of incarceration for a prison inmate is well over $40,000 (Scanlon, 2002). Based on prior research, labor market outcomes indicate that alcohol and drug dependence are potentially extremely costly. In 1980, the estimated cost for substance dependence for employers was $44 billion ($14 billion resulting from lost productivity), while the 1990 figures estimate that over $98 billion was lost by employers (Bray, Zarkin, Dennis, & French, 2000).

The overall economic cost of substance abuse was estimated at $415 billion in 1995. Of the more than two million deaths in the United States each year, one in four is the result of alcohol or illicit drug use. The cost of health care alone associated with these substances accounted for more than $114 billion (Horgan, 2001).

It is evident that substance dependence is costing our economy tremendously; both in time of lost productivity and the incalculable costs to family and other relationships. Does drug treatment work? Are we wasting our time?

Efficacy of Drug Treatment

More than 18 million people are current alcohol abusers and 5 million illicit drug abusers need drug treatment, but only a small number receive it (Horgan, 2001). In a recent study regarding the effectiveness of drug treatment, the White House Office of National Drug Policy (ONDCP), a constituent to the Executive Office of the President (1996), reported that drug treatment is more effective the longer an individual stays in

treatment. Drug treatment programs represented in this study include the four largest population studies to date (exceeding 200,000 individual samples), encompassing the most diversity in terms of researched treatment modalities, and represent the largest sample size of drug treatment studies in United States history.

This analysis reviewed three national multi-program modalities and one state program from 1969–1993 including the Drug Abuse Reporting Program (DARP), the Treatment Outcome Prospective Study (TOPS), the Drug Abuse Treatment Outcome Study (DATOS), and one statewide study, the California Drug and Alcohol Treatment Assessment (CALDATA). Each of these studies demonstrated that those staying in treatment in excess of three months had more successful outcomes and higher rates of improvement than those staying a shorter period of time.

In addition to reviewing the success of program effectiveness, the Executive Office study found that successful treatment programs should use a collaborative approach when dealing with substance dependent clientele. The use of a variety of therapies is a key concept, regardless of treatment modality. Effective treatment, according to this study, included: (a) a well defined treatment protocol, (b) ongoing assessments of the client, (c) concise case management as to engage the clients in the treatment process, (d) a variety of treatment interventions, and (e) the successful integration of a social support system preceding treatment.

In a study of one-year drug treatment outcomes by Moos, Moos, and Andrassy (1999), the researchers studied 2,376 patients in 88 residential substance dependence facilities. The researchers reviewed the therapeutic community model, the psychological rehabilitation model and the 12-step model of addiction treatment/recovery. They found

that programs with more intensive counseling services, namely therapeutic communities, had higher rates of social interaction and support than those of undifferentiated programs. Another key finding of their study was that longer treatment stays, a direct treatment course, and successful completion of treatment yielded higher one-year abstinence outcomes.

In the federally funded Drug Abuse Reporting Program (DARP), Sells and Simpson (1980) examined 44,000 admissions into 52 federal treatment agencies through self-reported data. The researchers analyzed the following four major treatment modalities: therapeutic communities, methadone maintenance programs, outpatient drug-free programs, detoxification units and intake only programs. Also included in the study was a comparison group of intake only, non-DARP treatment referrals. These data suggested that clients in therapeutic communities (36.9% abstinence rates) and outpatient drug-free programs (34%) had significantly higher outcomes of abstinence for the initial three years after DARP completion. Clients involved in methadone maintenance programs (29.5%) had above average abstinence rates and clients in intake only modality (21%) and detoxification modality (19.6%) had considerably lower incidences of long-term abstinence. Based on their findings, Sells and Simpson concluded that individuals who either had no treatment or treatment lasting less than three months had the poorest outcomes.

Orwin and Williams' (1999) study focused on predictors of retention in substance dependence treatment. These authors reviewed data from the National Treatment Improvement Evaluation Study (NTIES) which examined 3,117 individuals from 61 service delivery units based on length of stay and treatment modality designation. NTIES

was a national study conducted by the Center for Substance Abuse Treatment (CSAT) which began in 1992 and concluded in 1997. The purpose of this study was to evaluate the effectiveness of substance abuse treatment in programs supported by CSAT. Client data was collected at three different time periods: date of intake, date of exit/completion, and one year following treatment departure. Modalities reviewed in the study were short-term residential programs (21–30 days of treatment), long-term residential programs (120 day stays or longer), non-methadone outpatient treatment programs (90–119 day stays and 120 day stays or longer), and correctional treatment programs (41 to 89 day stays; 90–119 day stays; and 120 day stays and longer).

The results of this study revealed that programs of limited duration had a higher treatment completion rate but longer treatment programs had a higher abstinence rate. Moreover, the study also demonstrated that long-term residential treatment programs had higher completion rates than the other modalities of long-term treatment in non-methadone outpatient and correctional treatment modalities; the average length of stay in the long-term NTIES programs was 102.2 days.

Also shown to be significant was the role that case managers played in implementing a treatment program in the long-term modalities. According to the study, the increased interaction of case managers in the treatment environment played an integral part in the client's daily routine and provided positive reinforcement in aiding the client through the treatment process. The heightened visibility of allowing clients access to their treatment plan also produced a positive correlation in successful treatment completion.

Several other significant findings were also shown as result of this study. The role that vocational and/or educational training had in modalities with lengths of stay exceeding 120 days (non-methadone outpatient treatment and long-term residential treatment) was shown to be important and a likely predictor of a positive outcome. By attending vocational and/or educational classes, the rate of client retention increased significantly. Simpson, et. al. (1997) found in the Drug Abuse Treatment Outcome Studies (DATOS) that the odds of individuals remaining in drug treatment for 90 days or longer increased by six times if vocational and/or educational training were implemented in the long-term residential treatment model.

DATOS, a national study of substance dependence effectiveness based on the outcomes of four treatment modalities, has produced many relevant research findings in terms of full-scale drug treatment reviews. The study was funded by the National Institute on Drug Abuse (NIDA) and examined long-term residential, short-term residential, outpatient drug-free, and outpatient methadone treatment modalities. The study which took place from 1991–1993, examined 10,010 clients in 96 federally funded programs (Etheridge et al., 1997). According to Simpson, Joe, and Brown (1997), the results of DATOS suggest that if clients are to benefit from treatment, they must participate in the therapeutic process for an extended period of time (three months or above). According to DATOS, the ability of long-term residential treatment (including therapeutic communities) to provide structure into the client's life as well as provide a stage for behavioral change exceeded that of any other modality.

In a study by Condelli and Hubbard (1994) discussing the Treatment Outcome Prospective Study (TOPS), a long-term, large-scale study of 11,000 drug abusers, data

were analyzed concerning whether or not time spent in treatment yielded positive behavioral changes. The research results revealed that longer treatment stays (via therapeutic communities and long-term residential treatment modalities) resulted in reduced substance dependence, decreased criminal activity, and lower rates of unemployment for those individuals. This study suggests that a strong correlation between longer treatment stays and positive outcomes.

In 2000, the Castle Craig Hospital in Scotland conducted a study observing the effectiveness of extended care drug treatment outcomes over a two-year period. The treatment program approach used in the Castle Craig sample was primarily the Minnesota Model of recovery, much like the 12-step AA model. Much of the treatment module consisted of group therapy, Cognitive Behavioral Therapy (including Rational Emotive Behavioral Therapy), aftercare planning and regular attendance at meetings of Alcoholics Anonymous (AA) and Narcotics Anonymous (NA).

A follow-up of the Castle Craig study (206 former clients) between 1997 and 1999 compared abstinence rates. Each client had exited treatment program more than two years ago. The findings showed that 119 (48% of total intakes) of the 17 week treatment program completers had maintained continuous abstinence. Another 14% of those completing treatment reported having had a relapse within the past three months but were again abstinent from all mind altering substances. On the other hand, only 24% of those who entered Castle Craig and did not complete the program reported continuous abstinence. All in all, this study suggests that the longer clients spend in intensive treatment, the better the outcome regarding long-term abstinence.

In a study examining the effectiveness of twelve-step and cognitive behavioral treatment, Ouimette, Finney, and Moos (1997) stated that both methods of treatment were effective in treating clientele with substance dependence. The study, which examined 3,018 patients from the U.S. Department of Veterans Affairs, demonstrated that those who underwent either 12-Step treatment or cognitive-behavioral treatment were functioning at a much higher level than pre-treatment functioning levels. Clients in both modes of therapy reported having more success abstaining from alcohol and drugs, less depression and anxiety, fewer legal problems, and a higher employment rate. However, those opting for a 12-Step program yielded higher rates of abstinence at one-year follow-up.

One of the principles associated with continued abstinence in the twelve-step model of treatment (attributed to Alcoholics Anonymous) is the correlation between an alcoholic and/or addict helping another alcoholic and/or addict throughout the facilitation of the 12-step program, an activity known as sponsorship. An AA sponsor is one who guides an alcoholic through the 12-steps and provides encouragement in dealing with day-to-day challenges he or she (the sponsee) may face early in recovery. According to Miller and Sanchez-Craig (1996), within one year of treatment completion, the relapse rates are as high as 90%, with the bulk of these individuals continuing the use of substances at their pre-treatment level of dependence.

Pagano, Friend, Tonigan, and Stout (2004) examined the role of sponsorship in analyzing data from Project MATCH, a study of the effectiveness of three treatment modalities. The study underlined the importance of AA sponsorship and meeting attendance following the first year of treatment completion. A sample of 1,501 (87% of

the initial Project MATCH participants) was included in distinguishing the importance of these activities. The results show that there is no distinction between an individual's race, gender, socio-economic status, educational level or prior drinking behavior in helping other alcoholics; anyone can help anyone. The study also showed that participants who were either sponsoring other alcoholics or working the 12-steps were significantly more successful at maintaining abstinence at one-year follow-up. Another integral finding in this study was that those who were involved in meetings of Alcoholics Anonymous were more likely to be abstinent than those who were not.

Studies such as Project MATCH and DATOS suggest that long-term drug treatment consistently produces higher levels of abstinence. By taking individuals out of their present environment and providing them with the guidance of a staff that understands the process of recovery from substances of dependence, substantial progress may be achieved.

Summary

While the short-term model of recovery was the norm when treatment centers began operation in the 1960s, time and cost to insurance carriers have created the employment of short-term, out-patient treatment programs rather the more effective long-term treatment modality.

Monetarily, long-term treatment may be more expensive initially; however, the advantages of such programs produce longer term sobriety. By ensuring that the people have access to drug treatment, the efficacy of such treatment should be understood. In

sum, long-term treatment, according to research, is the long-term solution for people who are substance abusers/addicts and for society as a whole.

III. EFFICACY OF LONG-TERM AND SHORT-TERM RESIDENTIAL SUBSTANCE ABUSE TREATMENT MODALITIES

Insurance premiums, hectic schedules, family obligations and a host of other day-to-day realities favor drug treatment to be completed in a relatively short period of time. However, from a research perspective, is short-term treatment really effective in the long-run? Can abstinence be achieved for individuals with years of drug dependence in a 30-day treatment program and restore the mental, physical and spiritual damage that has occurred? Research would suggest otherwise. As society becomes more complex, short-term programs and outpatient services are increasingly favored because of the perceived high cost attributed to long-term residential treatment programs. Even in light of data that suggests the long-term efficacy of such programs is more cost effective, the emphasis towards shorter treatment stays continues to be the preferred option.

The central focus of a drug treatment program is to educate the individual with substance dependence behaviors on ways of coping without substances in future endeavors. Many drug treatment programs focus on guiding the individual through behavior techniques which promote complete abstinence while others examine psychological factors which may influence the individual to become dependent on substances of abuse. Research has yet to date determined which program modality offers the best solution.

Scope, Magnitude, Costs, and Treatment of Substance Use and Dependence

According to the National Survey on Drug Use and Health (NSDUH), the primary source of statistical information on substance dependence in the U.S. population, approximately 22 million Americans aged 12 or older were classified with substance dependence or abuse, totaling 9.4 percent of the U.S. population (Substance Abuse and Mental Health Services Administration, 2003).

The Substance Abuse and Mental Health Services Administration (2003) reports that of the 22 million people who met the abuse or dependence criterion, roughly 11.5 million were deemed substance dependent. Of these, 6.9 million were classified with just alcohol dependence; 3.3 million were classified with illicit drug dependence; and 1.3 million were classified with a diagnosis of dependence for both alcohol and illicit drugs.

According to the SAMHSA (2003), marijuana was the most commonly used illicit substance with 14.6 million current users. Following marijuana users were 4.4 million users of prescription narcotics (including codeine, OxyContin™, Vicodin™, Demerol™, etc.), two million cocaine users, 1.8 million users of tranquilizers (including Xanax™ and Valium™), 1.2 million stimulant users (including methamphetamines, Adderall™, and Ritalin™), 1.2 million hallucinogen users (including LSD, PCP, ecstasy, and psilocybin) , 400,000 sedative users (including barbiturates such as Nembutal™, Seconal™ , and Quaalude™) , and 166,000 heroin users.

In 2003, SAMHSA (2004) reported that untreated addiction costs approximately $400 billion per year and contributes to five of the six most costly health issues within American society. Addiction also contributes to nearly 20% of all Medicaid hospitalization costs; that is, nearly $1 of every $4 Medicare expends on inpatient

hospital care is associated with substance use and abuse (Horgan, 2001). In addition, the United States Department of Labor (2005) estimates that alcoholism alone results in more than 500 million lost work days per year.

According to Fuller and Hiller-Sturmhofel (1999) more than 700,000 people receive alcoholism treatment every day. Approximately 14 million Americans, however, are dependent on alcohol. The trend in treatment for alcoholism and drug addiction has shifted from residential treatment to outpatient treatment programs due to the rising costs of health care. Consequently, the time spent in treatment has been drastically reduced because of this treatment shift.

Similarly, SAHMSA (2004) reports 3.3 million people received some form of treatment for drug and/or alcohol dependence in 2003. However, according to the 2003 National Survey on Drug Use and Health (NSDUH), a decline existed between the numbers of people receiving "specialty" treatment (i.e. long-term treatment, therapeutic communities, etc.) from 2.3 million people in 2002 to 1.9 million people in 2003. Additionally, the NSDUH study found that one million people self reported they needed drug and/or alcohol treatment and did not receive it. Of these one million people, 41.2% were not ready to stop using substances. Of these, 33.2% cited barriers relating to cost or insurance policies as their reason for not entering; 19.6% reported reasons relating to the stigma of enrolling in drug treatment; and 17.2% believed they could handle their problem without treatment. Of the respondents, 27% reported making an effort to obtain treatment but were not rendered services. It is vital to take these numbers seriously as the NSDUH (the liaison between The White House's Office of National Drug Policy), tracks the goals of governmental drug treatment strategies.

The NSDUH study exposes several important questions in relation to the current state of drug treatment services in the United States. First, 27% of this population is not being rendered treatment. Is there a shortage of drug treatment? Are treatment centers unable to accommodate the increasing number of people addicted to drugs and/or alcohol? Secondly, if 33.2% of this population is not able to afford treatment or if insurance companies are unwilling to provide financial supports, what treatment, if any, are these people receiving?

The Objectives and Expectations for Drug Rehabilitation

When evaluating the efficacy of a drug abuse treatment modality, it is important to understand the many facets of a specific treatment program. The need for effective and efficient treatment is something that our society can no longer defer. Drug dependence imposes a human cost with thousands of lives being tormented and forever changed in self-destructive ways, not only for those who abuse substances but for society as well (National Research Council and Institute of Medicine, 2004). Be it an alcohol-related automobile accident, a heroin overdose, or infant mortality or disability as result of continued substance dependence, drug dependence is an epidemic with far reaching costs and implications for our society. Determining what is or is not an effective treatment modality involves an understanding of the facts about the drug and alcohol use which has permeated our society as a whole. Treatment programs must incorporate these understandings into recovery if recovery is to be effective.

According to the National Institute on Drug Abuse (NIDA) (2005) the ultimate goal of drug abuse treatment is to enable the dependent individual to maintain lasting

abstinence, the most widely used measure of clinical effectiveness. According to the Executive Office of the President (1996), abstinence is the ability not to use any substances which produce a change in an individual's current state of being.

Treatment, according to NIDA, should be tailored to the individual needs of the person to assist the addict in learning to control his present condition and to live a typical, productive life (NIDA, 2005). Currently there are approximately 11,000 specialized drug abuse treatment programs operating in the United States. While 11,000 programs appear to be a large number, it is, indeed, small in comparison to the problem; substance abuse increases every day (Sorensen, Rawson, Guydish, & Zweben, 2003).

Human and Monetary Costs of Substance Dependence

There is evidence that substance abuse treatment is both behaviorally effective and cost effective. Drug dependence costs our economy nearly $100 billion per year in crimes and imprisonment, reduced occupational productivity and for various treatment modalities for those affected. The economic benefits of drug abuse treatment – including more employment, less crime, and less need for expensive medical care – have been known for decades (Sorensen, Rawson, Gudyish, & Zweben, 2003).

Scanlon (2002) reported that in 1995, the estimated social cost of substance abuse in the United States was $276 billion. According to Dowd & Rugle (1999), drug-related illness, death and crime cost the United States nearly $70 billion. As a society, every person in our country pays an estimated $1,000 annually to cover the cost of unnecessary health care, additional law enforcement, automobile accidents, and lack of occupational production resulting from substance abuse.

The California Drug and Alcohol Treatment Assessment (CALDATA) study estimates that every $1 invested in substance abuse treatment has returned $7 in cost savings from a reduction in health care costs, crime rates, and occupational productivity loss (Dowd & Rugle, 1999). The Institute on Medicine states that where residential treatment costs approximately $12,500, the cost of incarceration for a prison inmate is well over $40,000 (Scanlon, 2002). Whereas in 1980 the estimated cost of substance dependence on employers was $44 billion ($14 billion resulting from lost productivity), the 1990 figures estimate that over $98 billion was spent by employers (Bray, Symptoms of Dependence, 2000).

Review of Treatment Modalities

The setting for alcohol and drug treatment has significantly changed during the past two decades. In the 1980s and early 1990s, the choice of treatment modality consisted of a 28-day inpatient stay. Currently, most treatment programs only provide inpatient treatment for 3-14 days, followed by a variation of outpatient treatment services. Both the 28-day and outpatient programs have been determined more effective by financial motivation rather than by empirically based research (Adinoff, Scannell, Carter & Dohoney, 1999).

According to the Substance Abuse and Mental Health Services Administration (SAMHSA) (2004), long-term residential treatment is defined as treatment that lasts more than 30 days. Short-term residential treatment is defined as treatment that lasts no more than 30 days. Long-Term Residential (LTR) and/or extended care programs include traditional therapeutic communities, modified therapeutic communities, and other

programs requiring residential treatment, generally lasting nine months or longer. Short-Term Inpatient (STI) programs generally kept clients in-residence for up to 30 days, with a focus on medical stabilization, abstinence, and lifestyle changes (The Drug Abuse Treatment Outcome Studies, 2001).

According to NIDA, the most reputable of all long-term treatment modalities is the therapeutic community. Therapeutic communities (TCs) serve as highly structured substance dependence programs ranging in length of stay from six to twelve months. Therapeutic communities are highly structured, residential treatment programs which promote recovery by having addicts and alcoholics live in the same setting. The primary goal of a TC is the successful reintegration of the individual into a drug-free, crime-free lifestyle. Often individuals residing in TCs have long histories of drug dependence, criminal association and social functioning deficits (NIDA, 2005).

Efficacy of Drug Treatment

In a study underlying the effectiveness of drug treatment, the Executive Office of the President (1996) reported that drug treatment is effective, and the longer an individual stays in treatment, the higher his or her likelihood of success becomes. Effective treatment, according to this study includes: a well defined treatment protocol, ongoing assessments of the client, concise case management as to engage the clients in the treatment process, a variety of treatment interventions and the successful integration of a social support system proceeding treatment.

In the federally funded Drug Abuse Reporting Program (DARP), Sells & Simpson (1980) examined 44,000 admissions into 52 federal treatment agencies through self-

reported data. Their data suggested that clients in therapeutic communities (36.9% abstinence rates) and outpatient drug-free programs (34%) had significantly higher outcomes of abstinence for the initial three years after DARP completion. Based on their findings, Sells & Simpson concluded that individuals who either had no episode of treatment or had treatment lasting shorter than three months resulted in the poorest outcomes.

The Drug Abuse Treatment Outcome Study (DATOS) is a national study across four treatment modalities (long-term residential, short-term inpatient, outpatient drug-free, and outpatient methadone treatment). The study ran from 1991–1993 and examined 10,010 clients in 96 federally funded programs (Etheridge et al, 1997). According to Simpson, Joe, and Brown (1997), the results of DATOS suggest that if clients are to benefit from treatment they must participate in the therapeutic process for an extended period of time (three months or above). According to DATOS, the ability of long-term residential treatment (including therapeutic communities) provide structure for the client as well as to providing a stage for behavioral change exceeded that of any other modality.

In a study by Condelli and Hubbard (1994) discussing the Treatment Outcome Prospective Study (TOPS), a long-term, large-scale study of 11,000 drug abusers, data were analyzed concerning whether or not time spent in treatment yielded positive behavioral changes among constituents. This research produced results which supported the conclusion that longer treatment stays (via therapeutic communities and long-term residential treatment modalities) resulted in reduced substance dependence, decreased criminal activity, and lower rates of unemployment for those individuals who completed

treatment. This study revealed that there is a strong correlation between longer treatment stays and positive outcomes.

In a study of one-year drug treatment outcomes by Moos, Moos, and Andrassy (1999), 2,376 patients in 88 residential substance dependence facilities were assessed. They found that programs with more intensive counseling services, namely therapeutic communities, had higher incidences of social interaction and support programs than those of undifferentiated programs. Another key finding of their study was that longer treatment stays, a focused treatment program, and successful completion of treatment yielded higher one-year outcomes.

Case Management and Effective Drug Treatment

The National Treatment Improvement Evaluation Study (NTIES) by Orwin and Williams (1999) provided a comprehensive assessment of drug treatment programs. In examining 61 drug treatment programs and 3,117 individuals with a substance dependence disorder, the researchers found several significant patterns in matching client services to future success in drug treatment. The role which case managers play in an individual's drug treatment program is paramount in the long-term efficacy of abstinence from substance(s). Persons who actively participated in the development of his or her treatment protocol had greater long-term success in the achievement of sobriety. This finding is very significant in that it portends success in the transition from treatment to the real world. Hence, the heightened visibility of a drug treatment plan is something drug treatment officials should become more aware of in future dealings with their clients.

The participation in vocational training concurrently with long-term drug treatment similarly yielded positive outcomes in treatment (NTIES, 1999). Giving the individual the opportunity to gain occupational skills was stated as a positive correlate to increased self-esteem, increasing the likelihood of drug treatment completion and continued abstinence from substances. Moreover, Simpson et al. (1997) found that individuals participating in vocational training had a six times higher probability of remaining in treatment when occupational training was incorporated into a long-term treatment plan.

Efficacy of Twelve Step Treatment/Cognitive Behavioral Therapy Programs

In a study of long-term effectiveness of drug treatment, Ouimette, Finney, and Moos (1997) examined the comparative efficacy between Twelve Step programs and cognitive-behavioral therapy. While Twelve Step intervention and cognitive-behavioral therapy differ in several ways, both have proven effective in the successful abstinence of drugs and/or alcohol. Both believe it is ultimately up to the individual to make the decision to change his or her lifestyle. The primary difference between the two types of treatment is that Twelve Step intervention typically involves the disease model of addiction which states that substance abuse is a biological or psychological problem, often leading to cycles of inebriety and soberness. By contrast, cognitive-behavioral therapy approaches substance dependence as a behavioral issue which is caused by maladaptive “thinking”.

Individuals participating in Twelve Step treatment are usually required to admit “powerlessness” over their drug(s) of choice, seek spiritual guidance from a “Higher

Power". Attendance at Twelve Step support groups (Alcoholics Anonymous, Narcotics Anonymous, Cocaine Anonymous, etc.), and work with a Twelve Step sponsor is also of major importance. A sponsor is a person, in recovery and/or Twelve Step groups, who facilitates the individual's progression through the Twelve Steps, providing recovery support for the individual in times of distress. Substance abuse, according to cognitive-behaviorists is an inability to successfully cope with life's stressors using drugs and/or alcohol to mask the effects of distorted thinking. Conversely, the goal of cognitive-behavioral treatment is to change the individual's thinking patterns and raise the individual's effective coping strategies to deal with stressful life situations.

The Ouimette, Finney, and Moos (1997) study finds both methods to be integral in long-term success of future abstinence from substances. Twelve Step programs, however, are typically most effective in the long-run. In both instances, individuals who adhered to treatment were (a) more likely to remain abstinent from illicit drugs and/or alcohol, (b) less likely to experience mild-moderate psychological problems (anxiety and/or depression), (c) encounter fewer legal problems, and (d) experience fewer instances of incarceration or homelessness than had they not undergone drug treatment. According to Moos, Moos, and Andrassy (1999) Twelve Step intervention is typically most effective in long-term treatment settings (therapeutic communities, etc.); thus, programs employing a Twelve Step model provide a more directed and rigorous approach to drug treatment. This is accomplished by encouraging individuals to participate more intensively and become in engaged in Twelve Step meetings, associate with a Twelve Step sponsor, and substitute old behaviors and associations with healthy behaviors and associations with individuals in recovery.

Treatment Settings and Effect on Treatment

Successful drug treatment is influenced by several factors. Among the most important components are: (a) treatment setting (inpatient or outpatient), (b) treatment variables such as long-term or short-term, (c) length of treatment stay, (d) therapist techniques, and (e) the presence of an aftercare protocol.

In a study by Finney, Hahn, and Moos (1996) which examined the effectiveness of inpatient and outpatient alcohol treatment, several questions were explored in relation to treatment settings. A number of research studies cited in the Finney et al. research (Ritson, 1968; Kissin, Platz, & Su, 1970; Mayer, 1971; McLellan, Luborsky, Woody, O'Brien, & Druley, 1983)) noted several strong positions regarding the effect of drug treatment settings. Ritson (1968) found that individuals who had personality disorders typically fared poorly in outpatient treatment. Kissin et al. (1970), however, stated that individuals who were more socially competent experienced higher success rates in outpatient treatment. Kissin et al. also noted that individuals who were socially unstable experienced more positive outcomes in inpatient care. Supporting this position, Mayer (1971) suggested that individuals who are less socially stable were more likely to improve with the structure of inpatient, residential care than that of outpatient drug rehabilitation. Finally, McClellan et al. (1983) stated that those persons who entered treatment with serious family, financial, legal and/or occupational troubles performed less successfully in outpatient treatment than in an inpatient treatment facility.

A common theme suggested by these researchers is that inpatient treatment provides positive relief from several stressors that impede the achievement of sobriety or

abstinence from drugs and/or alcohol. These include: (a) removing the alcoholic from his or her previous environment to a setting where recovery is the primary focus of the individual's life; (b) intensive treatment that enables the individual to continue with the treatment protocol, hence encouraging the individual to become committed to sober living and to adhere to an aftercare protocol; (c) availability of medical and/or psychiatric care, typically not affiliated with day or outpatient treatment settings; and (d) intensive addiction therapy that directly challenges the individual to become responsible for managing his or her addictive behavior(s).

The major advantage of outpatient treatment is allowing the individual the ability to remain in his present environment (Finney, Hahn, & Moos, 1996). Supporters of outpatient treatment believe that the major benefit of their approach is allowing the individual to work through his or her addiction in the least restricted environment. Additionally it is thought that in outpatient counseling, the individual is able to apply new-found, healthy living habits in the "real world" as opposed to the confinement of a rehabilitation treatment center. Both approaches encourage transition from negative behaviors to positive behaviors as exemplified by adherence to a Twelve Step philosophy.

Relapse and the Importance of Sponsorship

Relapse, the failure to remain abstinent from substance(s) despite attempts to stay sober is a common occurrence among individuals with a substance dependence disorder. Miller and Sanchez-Craig (1996) stated that relapse rates are as high as 90% for most individuals within the first year of treatment. Effective relapse prevention strategies and

aftercare protocols must be implemented to effectively reduce relapse. Relapse strategies prove most effective when combined with the moral support of other addicts/alcoholics, along with attendance and participation in a Twelve Step group.

Most drug treatment programs encourage individuals to participate in some form of Twelve Step program once treatment has been completed. Sponsorship, recovery meeting attendance, and association with other people in recovery are the most prominent elements noted for long-term sobriety maintenance. Research by Pagano, Friend, Tonigan and Strout (2004) debunks the notion that only 10% of those who complete alcohol/drug treatment in the United States are sober at one year follow-up.

Project MATCH, a national longitudinal study examining the effectiveness of three treatment types for alcohol use disorders, found several key findings relative to success at one-year follow-up. Individuals who were in relations with a Twelve Step sponsor and/or had worked the Twelve Steps were significantly more successful in remaining abstinent from alcohol and/or drugs than those who were not active with a sponsor or practicing the Twelve Steps. The central theme of this finding is that by helping other alcoholics and/or addicts, regardless of length of time in sobriety, the individual strengthens his or her own sobriety. According to the researchers, helping others in recovery provides a sense of individual purpose, gives the individual and helper comfort in knowing the shared experience of substance dependence is similar, and reinforces the potential benefits of remaining abstinent from drugs and/or alcohol.

Statement of the Research Problem

Evaluating the effectiveness of a drug abuse treatment program involves understanding the facets of a particular treatment modality. However, few studies have been conducted which evaluated the efficacy of substance dependence treatment based on length of stay. Therefore, there is a need to examine whether or not length of stay in treatment is a likely predictor of long-term success regarding abstinence or sobriety.

Purpose of the Study

The purpose of this study was to examine which drug treatment modality was most relevant in serving the needs of individuals with substance dependence diagnosis. This study examines the effectiveness of two drug treatment modalities: (a) long-term residential treatment extended care and (b) short-term residential treatment and its effectiveness in serving individuals with substance dependence. The following research questions were developed for purposes of this study:

1. What are the demographic characteristics of individuals with a substance dependence diagnosis participating in the study?
2. Based on length of time spent in treatment, which drug treatment program was most effective in long-term abstinence?
3. Which additional characteristics (Successful completion upon discharge, aftercare program, relapse prevention techniques, etc.) contributed to a positive drug treatment outcome?

Description of Sample

Participants in this study were former clients of the St. Christopher's Residential Treatment Programs (located on 3613 Government Street, Baton Rouge, LA 70806) for chemical dependency. The sample consisted of males, age eighteen (18) and above who were admitted to the St. Christopher's program for purposes of drug rehabilitation. The population of interest is adults aged 18 or older with a drug use disorder, which is defined as having dependence on or abuse of an illicit drug in the past 12 months. St. Christopher's is a continuum of Residential Treatment Programs for persons recovering from substance dependence. The St. Christopher's treatment program is based on the premise that chemical dependency is a disease. St. Christopher's stresses that recovery needs to address the spiritual, mental, emotional, and physical deterioration that occurs from the active disease through total abstinence in a residential treatment facility.

Long-term and short-term residential substance dependence clients were interviewed for this study. Participants were randomly selected based on treatment modality (either long-term or short-term). The potential pool of respondents for the study was 100 participants. St. Christopher's attempted to contact fifty former long-term treatment clients and fifty former short-term treatment clients via telephone for an interview regarding prior treatment experience. Thirty participants were available at the time of the telephone questionnaire administration. Accordingly, participants consisted of a long-term treatment sample of 20, and a short-term treatment sample of 10, making the total sample size (n = 30).

No recruitment was necessary. All data were pre-existing from a one year follow-up questionnaire developed by St. Christopher's and disseminated via telephone

interview. A letter of consent from Mr. Dwayne Beason (CEO of St. Christopher's) is included, which granted permission to use these data (see Appendix A). The questionnaires were administered to 30 former clients of the St. Christopher's program. Each participant had not been involved in a St. Christopher's Residential Treatment Program at least three months before the interviews took place (between May 2004 and July 2004). No respondent interviewed was actively involved in any treatment modality from St. Christopher's at the time of data collection.

Description of Procedures

The data set consisted of pre-existing information from St. Christopher's Residential Treatment Programs for purposes of drug treatment follow-up. The researcher contacted St. Christopher's for purposes of the analysis of drug treatment data. In a phone conversation with Mr. Dwayne Beason, CEO of St. Christopher's Residential Treatment Programs, the researcher identified the need for additional research in the field of substance abuse treatment efficacy and asked if he was interested in having his residential recovery program analyzed.

A short time later, Mr. Dwayne Beason contacted the researcher and expressed interest in having a follow-up phone interview via questionnaire (see Appendix A). A random number of client records were selected from his database with the intent of evaluation. The researcher agreed to analyze the data set at no cost to the St. Christopher's program for purposes of this study. The questionnaire was manufactured by ideas of the researchers and St. Christopher's Residential Treatment Programs. St. Christopher's had the decision in what was to be included in the questionnaire and altered

the format in ways which best suited the needs of those administering the interview. A letter of consent is included which details the agreement between the researcher and St. Christopher's Residential Treatment Programs (see Appendix B).

The phone interviews were conducted by the staff of St. Christopher's between May 2004 and July 2004. Mr. Beason financially compensated personnel from his treatment center to conduct the telephone interviews. Client files were pulled randomly through a system implemented by Mr. Beason. All client information was anonymous at the time of data transfer.

Mr. Beason's staff attempted to contact approximately 100 former clients on behalf of this study. Mr. Beason provided the researcher with thirty (30) individual sets of the completed telephone questionnaire. Mr. Beason mailed the researcher hard copies of the data sets via United States certified mail in March of 2005.

Upon receipt of the treatment data sets, the researcher began analyzing the data based on relevance of pertinent information. The data were imported into an SPSS file. SPSS was used to generate descriptive data. Due to the limited breadth of information received, descriptive statistics were used in the analysis of data sets.

Complete data forms were received by the researcher. The researcher organized the information according to relevance for purposes of the study. Approximately 100 former clients were contacted for purposes of this study. However, only 30 samples were completed upon receipt of data. Many of the clients who were unreachable had disconnected telephone numbers, and it is hypothesized that many of them had geographically relocated.

For purposes of this study, demographic data was collected on participants to identify characteristics as they relate to St. Christopher's Residential Treatment Programs client admissions. Between the two groups of individuals examined for this study, thirty participants (n = 30); twenty long-term (n = 20) and ten short-term (n = 10) data sets were received.

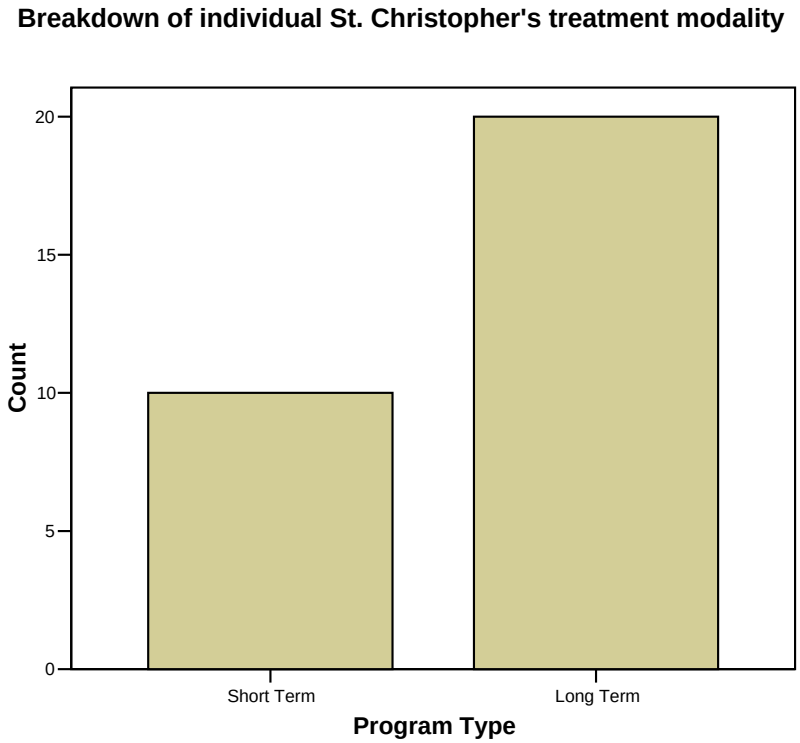

Figure 1: Treatment Modality

Design of Study/Instrumentation/Results

The researcher employed items from a pre-existing questionnaire distributed by the St. Christopher's Residential Treatment Program. The fourteen-item questionnaire contained items pertinent to individual substance dependence characteristics and factors that influenced substance dependence treatment. In addition to demographic

characteristics, the questionnaire included items related to past substance abuse history, the ability to remain abstinent and length of time spent in treatment. Respondents were prompted by staff members of St. Christopher's with multiple choices for their answers via telephone questionnaire (Appendix B represents the questionnaire in full).

The demographic information included in this data set consists of: (a) age of the respondent, (b) socio-economic status of the respondent, (c) respondent's level of education, and (d) geographic locale of respondent. Questions pertaining to alcohol and/or drug history, prior treatment experience, and current abstinence included: (a) primary reason for treatment intake, (b) substance of choice at intake, (c) prior treatment admissions, (d) length of stay/modality entered in a St. Christopher's program, (e) treatment completion and/or graduation, and (f) current level of abstinence. In addition to the above items, two additional questions pertaining to individual maintenance of sobriety since exiting the treatment program were analyzed: (a) what factors contributed to continued abstinence, and (b) what factors contributed to relapse. Finally, questions relating to overall St. Christopher's treatment experience were analyzed. These included: (a) overall satisfaction with the St. Christopher's Residential Treatment Program, and (b) perceived quality of the St. Christopher's Residential Treatment Program.

Results

Participants were requested to answer questions pertaining to their St. Christopher's Residential Treatment Program experience. In this section of the study the questionnaires, as well as the results of the study, are presented. Descriptive statistics are used to explain the results of the study.

Demographics

Questionnaire Component One: Age

The first section of the questionnaire examined the age group of clients' at the onset of drug treatment. Respondents answered either: (a) 18-25, (b) 26-35, (c) 35-50, (d) 50 and above.

Respectively, a bimodal response between age groups was most prominent among those individuals aged 18-25 (36.67%) and 35-50 (36.67%). Individuals aged 26-35 (23.33%) and 50 and above (3.33%) made up the remainder of the age group identifiers.

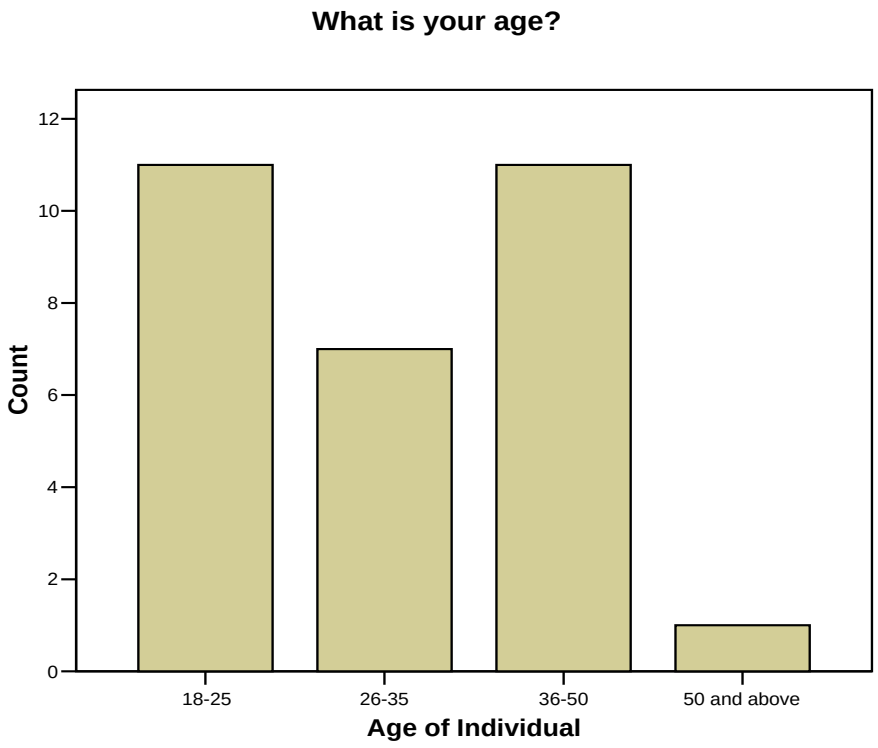

Figure 2: Modal Age Range of Respondents

The long-term sample (n = 20) consisted primarily of individuals aged 18–25 (45%). Those aged 35–50 (30%) categorized the second group, while the 26–35 age group comprised the additional 25% of the long-term sample. There were no respondents above the age of 50. There are several hypothetical equations for the age variance in this group. Familial obligations could have potentially affected the lower levels of care for individuals above 50. Additionally, many of these individuals prefer short-term care as a means of treatment due to heightened financial and occupational obligations. The researcher views the higher incidence of admissions in the 18–25 age groups as these individuals having a harder time achieving sobriety, hence higher numbers, due to increased peer pressure and the feeling that “I am too young to end these behaviors”. On the other hand, the average 18-25 year old does not have the familial and/or financial obligations of older counterparts. Thus, those in their age group are able to take the time (an average of six months) to complete a long-term treatment protocol. It is believed that the high treatment incidence (55%) in the 26–35 and 36–50 age groups is attributed to heightened physiological and psychological addictive behaviors exhibited by these groups.

The short-term sample (n = 10) consisted primarily of individuals aged 35-50 (50%) followed by 18-25 age group (20%), 26–35 age group (20%), and 50 years and above (10%). Again, it is posited that familial obligations is the major factor behind the high incidence of those above 35 in short-term treatment. Family support needs to be implemented in order to allow people in this group to meet financial and familial obligations. Family obligations work against the favorability of long-term treatment but appear to be more flexible for those without families and/or careers.

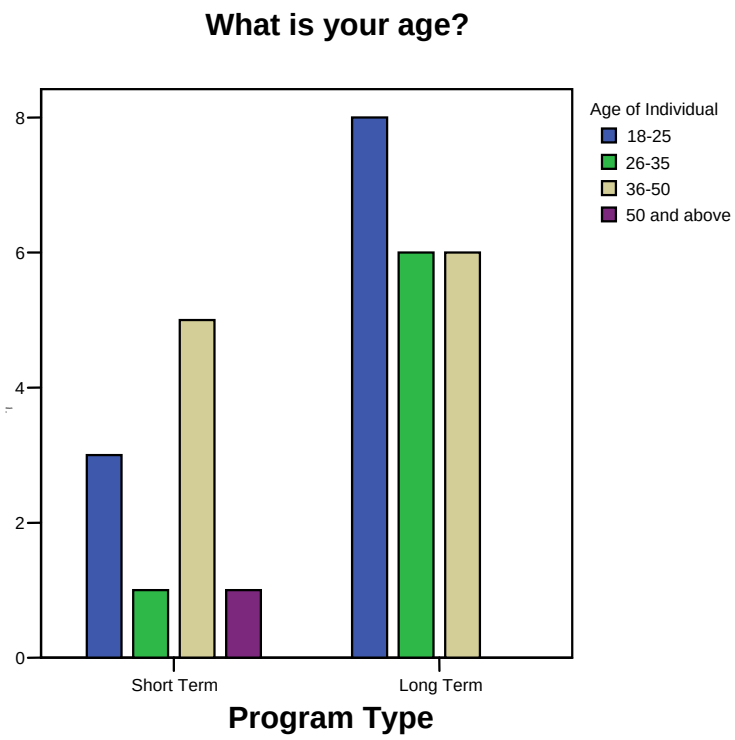

Figure 3: Long-Term and Short-Term Treatment Modality by Age

Questionnaire Component Two: Level of Education

Respondents were examined based on the level of education which they had achieved at the onset of drug treatment. Respondents answered either: (a) High School diploma/GED, (b) Some college but no degree, (c) Bachelor's degree from a four-year institution, (d) Post-bachelor's degree (Master's, PhD, etc.).

The second demographic characteristic viewed was level of education achieved by respondents. The bimodal response between the two groups is as follows: 63.33% had attended some college but did not graduate; 16.67% had graduated high school or obtained a G.E.D.; 10% had attained a bachelor's degree from a four year institution;

3.33% had an associates degree; 3.33% had either a masters degree or Ph.D.; and 3.33% had an educational background not listed above.

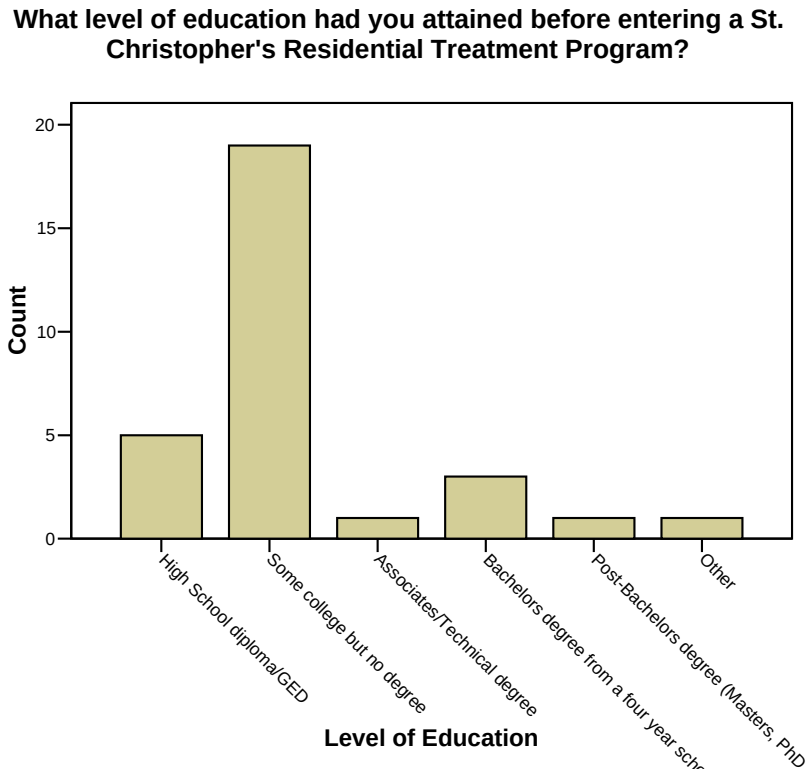

Figure 4: Level of Education Achieved

Of the long-term clientele the highest percentage (65%) had attended some college but did not attain a degree; 15% had either graduated high school or obtained a G.E.D.; 10% had received a post-bachelor's degree; and 5% each had either received a bachelor's degree or received some other form of education not listed above. Of the short-term clientele 60% had attended some college; 20% had finished high school or obtained a G.E.D; 10% had a post-bachelor's degree; and 10% had some alternative form of education not listed in the questionnaire.

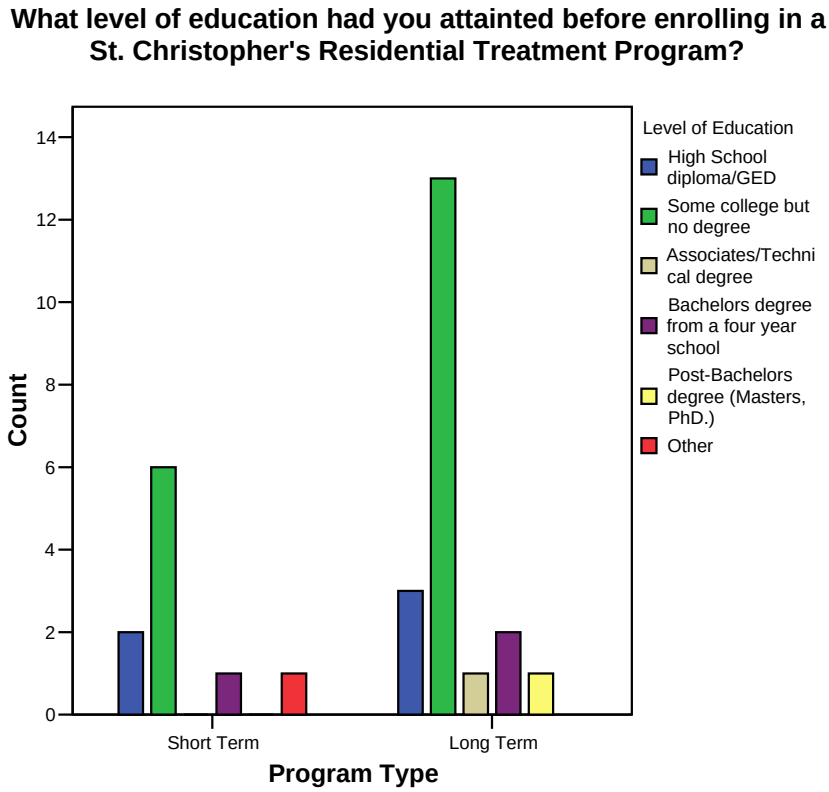

Figure 5: Level of Education Achieved by Treatment Modality

Questionnaire Component Three: Annual Income

Annual income of respondents was represented by the following distribution: (a) $18,000 and below, (b) between $18,000 and $25,000, (c) between $25,000 and $50,000, (d) between $50,000 and $200,000, and (e) $200,000 and above.

The third demographic area of the questionnaire consisted of the respondent's annual income or socioeconomic status. Between the two treatment groups those earning $18,000 and below constituted the highest percentage of respondents (36.67%). This was followed by $18,000-$25,000 (30%), $25,000-$50,000 (23.33%), and $50,000-$200,000 (6.67%). Another 3.33% chose not to respond to the question. Those who attended the

short-term treatment program had higher yearly incomes than those of long-term treatment individuals; long-term treatment costs are typically significantly higher than those of short-term costs.

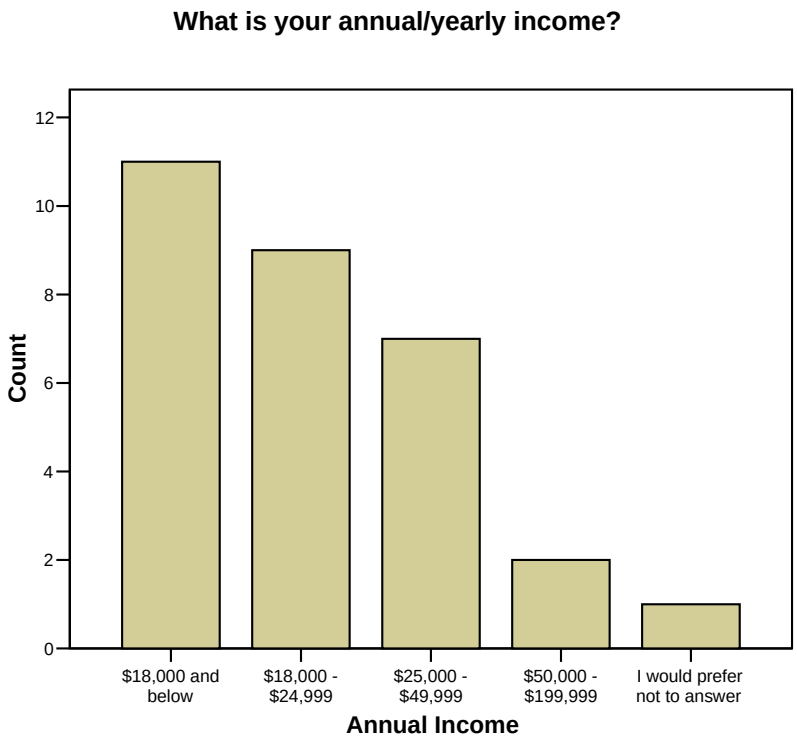

Figure 6: Annual Incomes of Respondents

Of the twenty respondents from the long-term sample, 45% of them responded that their annual income was less than $18,000. Those earning $18,000-$25,000 represented 35% of the respondents followed by 15% earning $25,000-$50,000 and 5% earning $50,000-$200,000, respectively. In the short-term sample, those earning $25,000-$50,000 (40%) represented the highest percentage of respondents. Both the $18,000-$25,000 range and the $18,000 and below range represented the second highest

percentage of annual income at 20% each. This was followed by the $50,000-$200,000 range which was 10% of the sample.

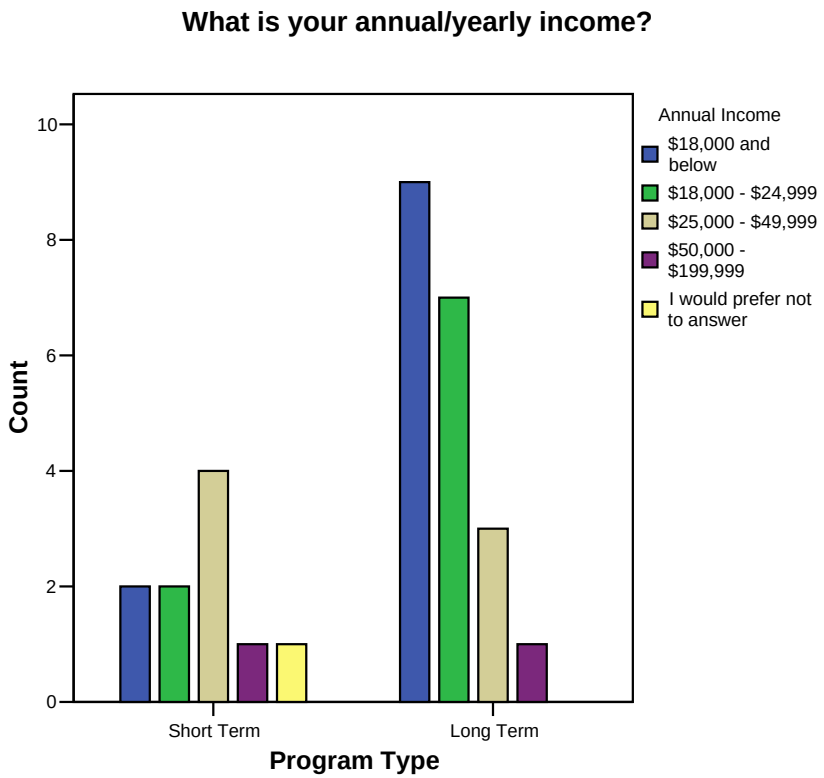

Figure 7: Annual Incomes of Respondents by Treatment Modality

It is believed that the correlation between age and annual income is significant for this sample. The 18-25 age group (36.67% of the total sample) indicated the lowest level of annual income $18,000 and below (36.67%). However, the $25,000-$50,000 range was highest among those aged 35 and above; especially in the short-term sample where 50% of respondents reported making at least $25,000/year or more.

Questionnaire Component Four: Geographic Location

Respondents were asked to identify the geographic location in which they lived at the time of questionnaire. Responses ranged from: (a) large metropolitan area (1,000,000 in population and above), (b) average metropolitan area (200,000-999,999 in population), (c) small metropolitan area (50,000-199,999 in population), (d) large urban area (20,000-49,999 in population), (e) small urban area (3,000-19,999 in population), and (f) rural area (below 3,000 in population).

Those respondents living in regions within an urban, metropolitan area of 200,000–1,000,000 inhabitants was by far the highest percentage observed (83.33% of the total sample). Those respondents living in small metropolitan areas (50,000–200,000) were next with 10%, followed by those living in small urban areas (3,000–20,000) and rural areas (below 3,000 people) each with 3.33%, respectively.

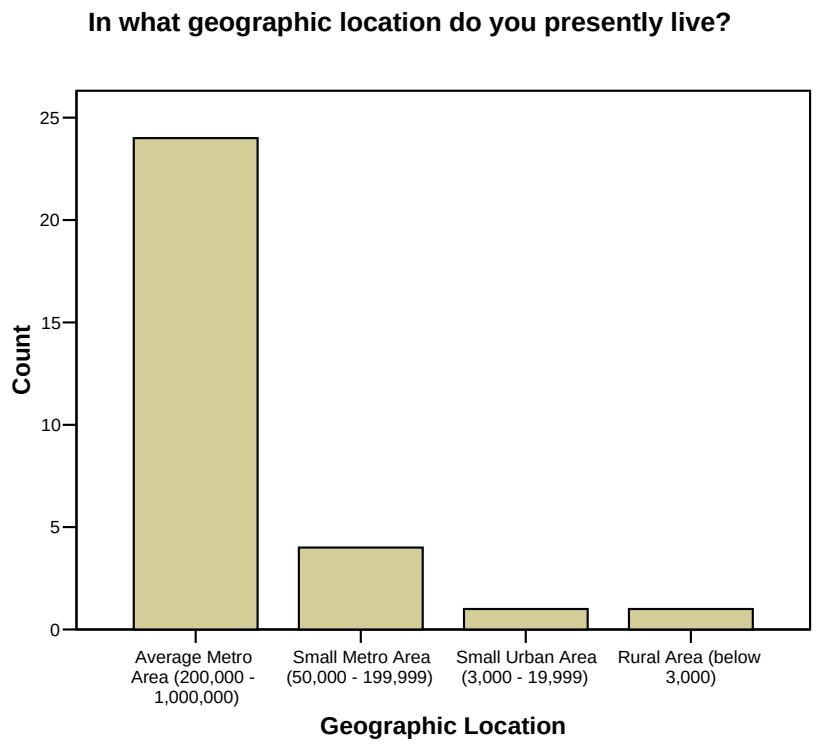

Figure 8: Geographic Type

The demographic breakdown of geographic locations between the two treatment groups showed that: 90% of long-term respondents and 70% of short-term respondents resided in an urban, metropolitan area of 200,000-1,000,000. Small metropolitan areas of 50,000-200,000 individuals comprised 5% of the long-term sample and 20% of the short-term sample. Finally, those living in small urban areas of 3,000-20,000 inhabitants made up the final 5% of the long-term sample and those living in rural areas below 3,000 people made up the remaining 10% of the short-term sample.

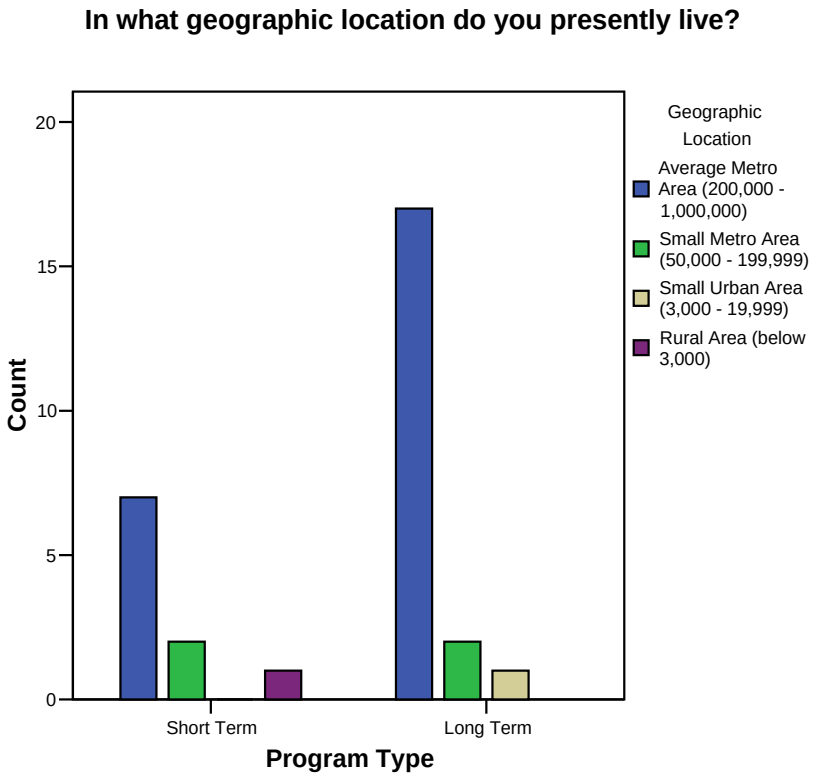

Figure 9: Geographic Type by Treatment Modality

Treatment Characteristics

Included in this section of the questionnaire are questions pertaining to (a) whether the client had entered a drug treatment program prior to entry into a St. Christopher's treatment modality, (b) the primary reason(s) for entering a St. Christopher's treatment program, (c) the primary drug(s)/substance(s) of choice for respondents upon entry into a St. Christopher's program, (d) the length of time spent in a St. Christopher's treatment program, and (e) completion from the designated treatment protocol.

Questionnaire Component Five: Primary Reason for Treatment Intake

Respondents were asked to disclose the primary reason for entering drug treatment. Respondents answered either: (a) your own personal reasons, (b) court and/or legal issues, (c) family pressure, (d) other reasons. It should be noted, for purposes of this study, this question was intended to determine the individual's acknowledgement and/or acceptance that drug treatment was necessary.

Court and/or legal issues was the most frequent reason for entering a St. Christopher's program (43.33%), closely followed by personal reasons identified by the individual (36.67%). (It should be understood that the "personal reasons" identified by the individual may include the individual's recognition that a drug/alcohol problem existed and that their life had become unmanageable due to the presence of alcohol and/or drugs). For this study, family pressure represented 10% of client intakes into the St. Christopher's program and the final 10% of respondents listed "other" reasons.

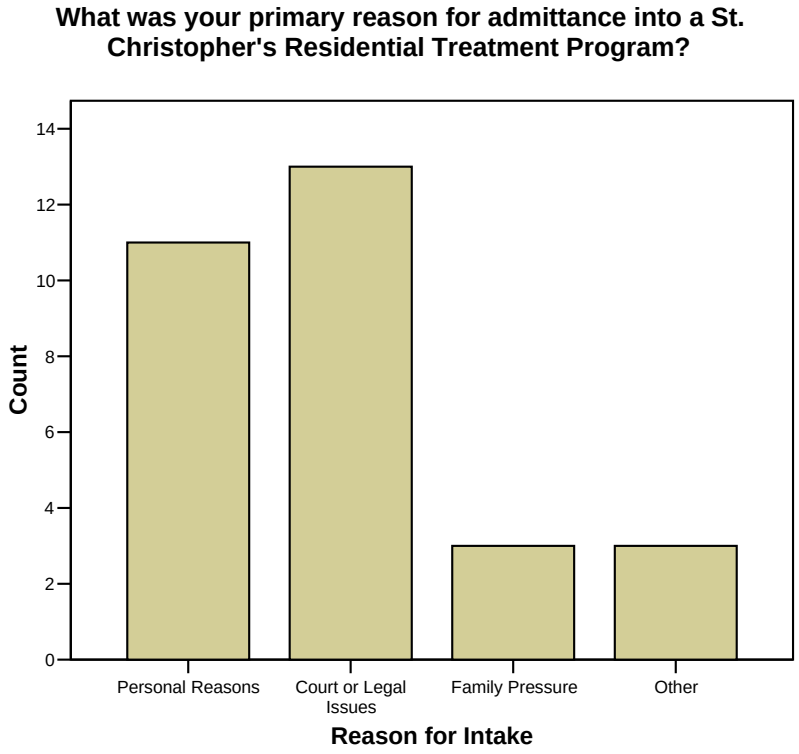

Figure 10: Reasons for Seeking Treatment

Of the long-term group of respondents, 45% stated that court or legal issues caused their enrollment in a St. Christopher's program; 35% cited that "personal reasons" attributed to their admission; 10% listed family pressure as the primary reason for engagement into St. Christopher's, followed by 10% who listed "Other" as their fundamental reason for entering. The short-term percentages did not vary much from their long-term counterpart result. Court and legal troubles combined with "personal reasons" were attributed for 80% of the client admissions into the short-term program (40% each); this was followed by 10% for both familial pressures and other reasons not listed in the questionnaire.

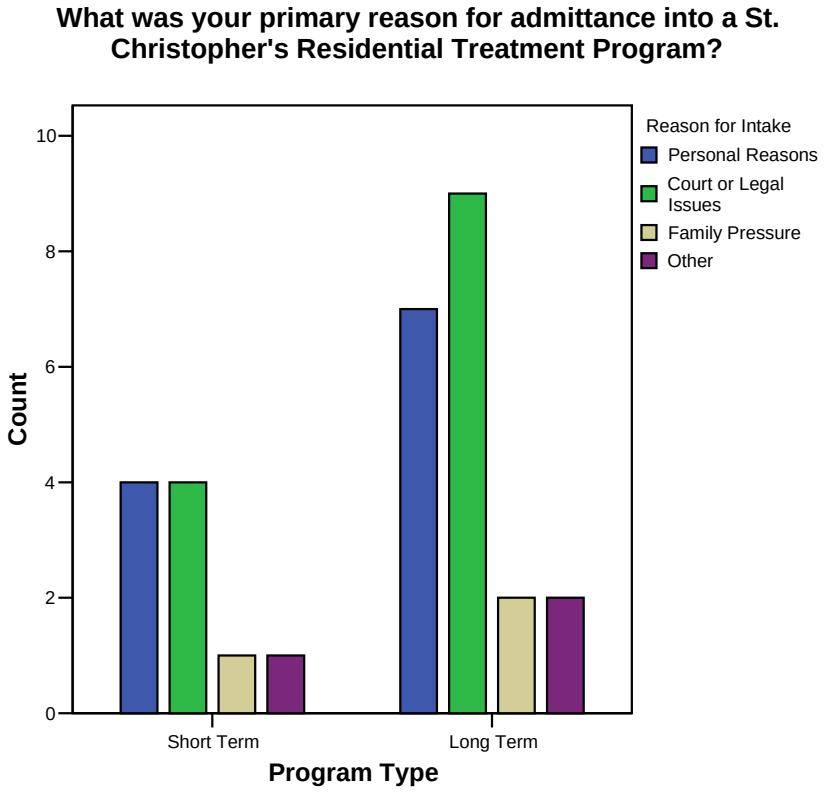

Figure 11: Reasons for Seeking Treatment by Treatment Modality

Questionnaire Component Six: Substance of Choice at Intake

Respondents were asked to disclose the primary substance of choice prior to entering drug treatment. The substances that were listed include: (a) alcohol, (b) marijuana, (c) amphetamines (including cocaine/crack, speed, amphetamines, etc.), (d) hallucinogens (including LSD, ecstasy, etc.), (e) opiates (including heroin and prescribed pain killers), or (f) a combination of several drugs.

Along with the individual's primary reasons for entering drug treatment, one must also look at what drug/substance of choice caused his admission into such a facility. The

substance(s) of choice among respondents varied considerably. However, approximately five of every ten persons surveyed stated that alcohol was the drug of choice (46.67%).

Approximately 36.67% of respondents reported that poly-substance abuse, or the use of a conglomeration of the drugs listed in the survey, was the main problem upon entering treatment. These respondents stated that a combination of (a) alcohol, (b) marijuana, (c) amphetamines (including cocaine and crack), (d) hallucinogens (including LSD and Ecstasy), (e) opiates (including heroin and prescription pain killers) was the primary reason for admission. Opiate users (10% of admissions) comprised the third highest percentage of people entering a St. Christopher's program, followed by marijuana users (3.33%) and amphetamine users (3.33%).

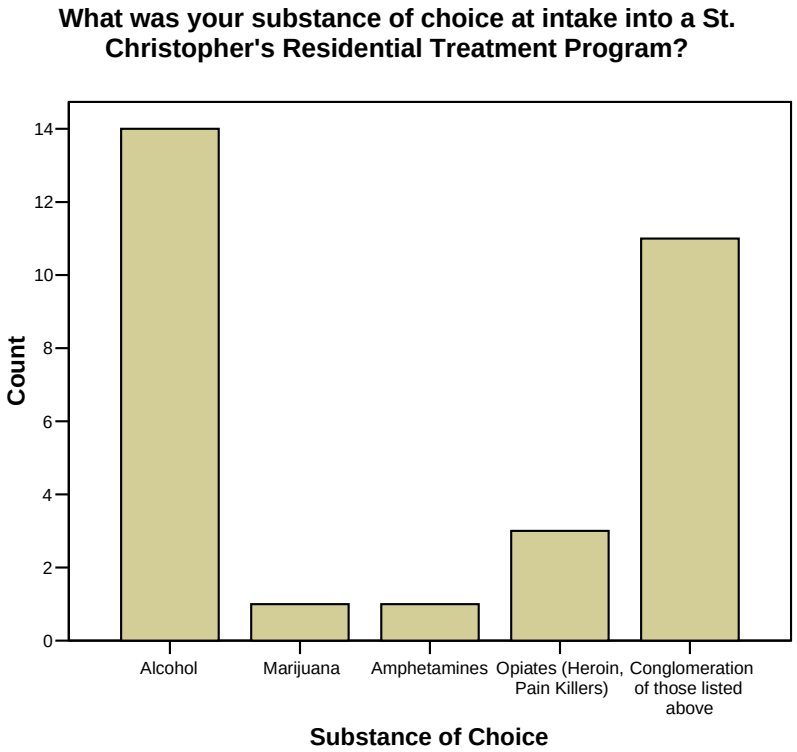

Figure 12: Substance of Choice at Treatment Intake

Of the long-term treatment respondents 90%, reported either alcohol (45%) or poly-substance abuse (45%) was their substance(s) of choice. Opiate users constituted the final 10% of the long-term sample. When viewing the short-term sample, alcohol again represented the highest reported substance of choice (50% of admissions). Those using a conglomeration of substance (poly-substance abusers) made up 20% of the short-term sample, followed by marijuana (10%), amphetamines (10%), and opiates (10%).

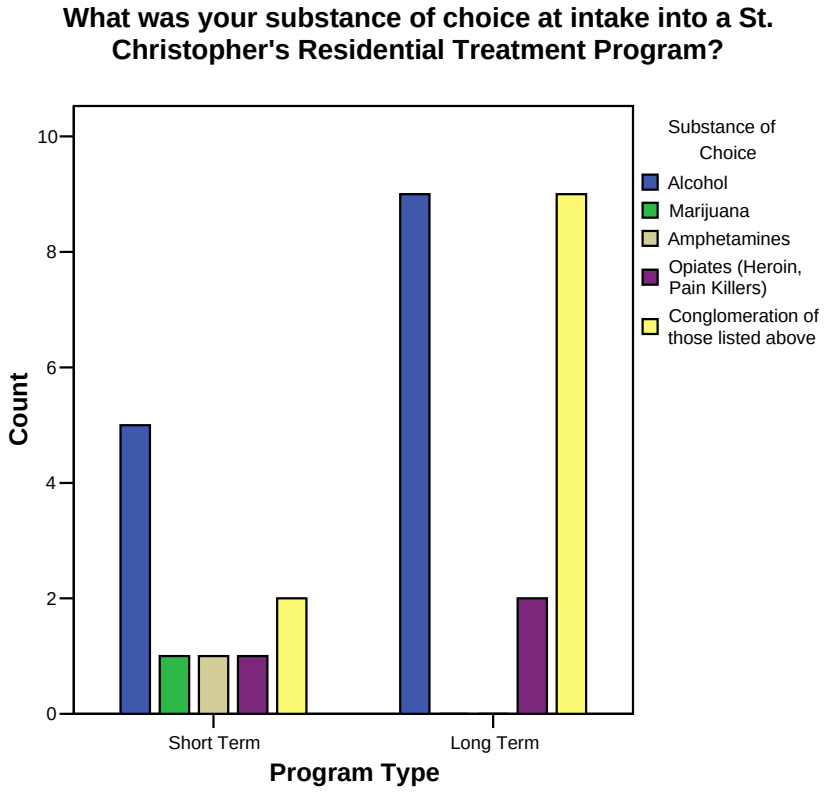

Figure 13: Substance of Choice at Intake by Treatment Modality

Questionnaire Component Seven: Prior Substance Dependence Treatment Admissions'

Respondents were asked whether they had entered into a form of substance dependence treatment prior to admission in a St. Christopher's treatment program. If

respondents answered “yes,” they were asked a follow-up question related to the number of drug treatment programs they had entered before St. Christopher’s, for what duration they stayed in a prior drug treatment program, and how long they had been able to maintain sobriety once they exited drug treatment.

Of the 30 individuals asked about previous participation in a drug treatment program prior to their admission into St. Christopher’s, 50% answered “yes” and 50% answered “no.” When grouped into treatment protocols, the long-term (n = 20) and short-term respondents (n = 10), half had engaged in some form of drug treatment before entering a St. Christopher’s treatment program.

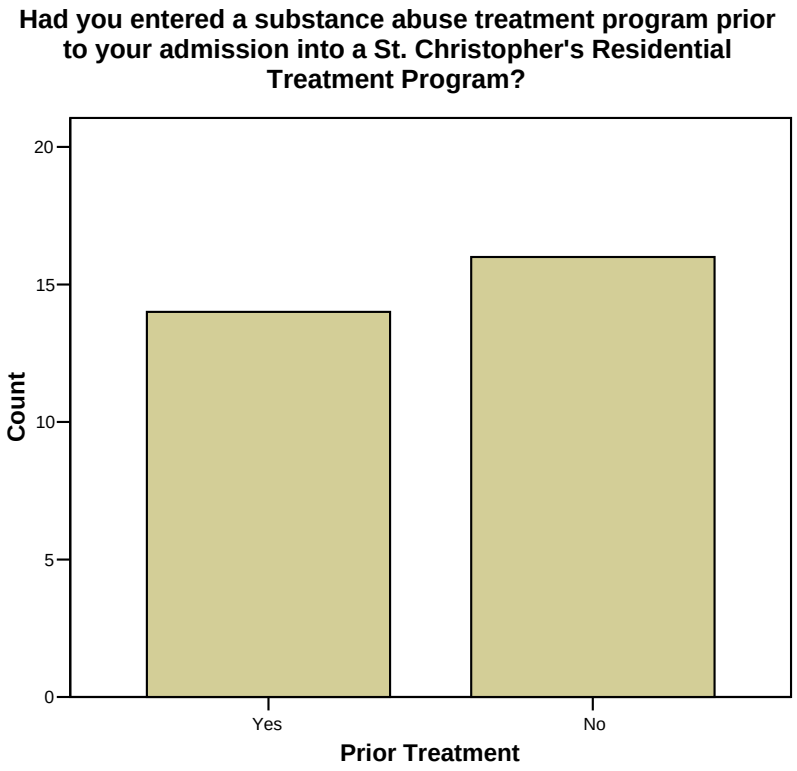

Figure 14: Prior Treatment Experiences

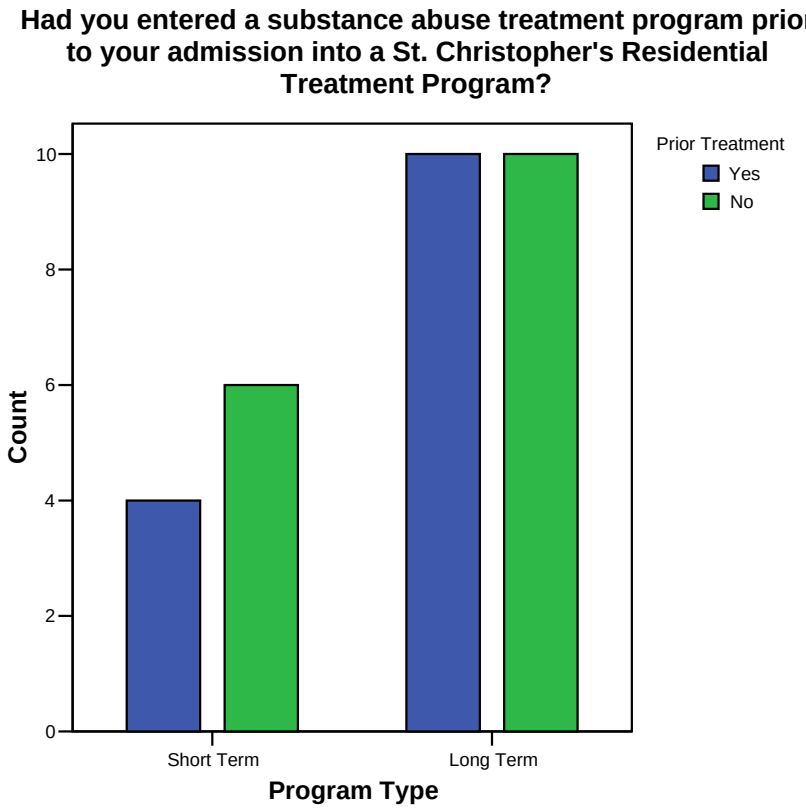

Figure 15: Prior Treatment Experiences by Treatment Modality

Questionnaire Component Eight: Length of Time Spent in a St. Christopher's Treatment Modality

Respondents were asked which treatment modality they participated as clients in a St. Christopher's Residential Treatment Program. Respondents answered either: (a) short-term treatment lasting one month or less, (b) residential treatment lasting up to three months, (c) residential long-term treatment lasting up to six months, (d) residential long-term treatment from six months and above, or (e) intensive outpatient treatment.

For purposes of this study, length of time spent in treatment, is a fundamental value when assessing the efficacy of substance dependence treatment. Of the thirty

respondents, 60% reported having enrolled in a residential, long-term treatment program greater than six months. Those residing in long-term treatment lasting no more than six months represented 6.67% of the sample. Thirty percent of respondents reported having been in treatment no more than 30 days and the final 3.33% were in residential long-term treatment up to three months.

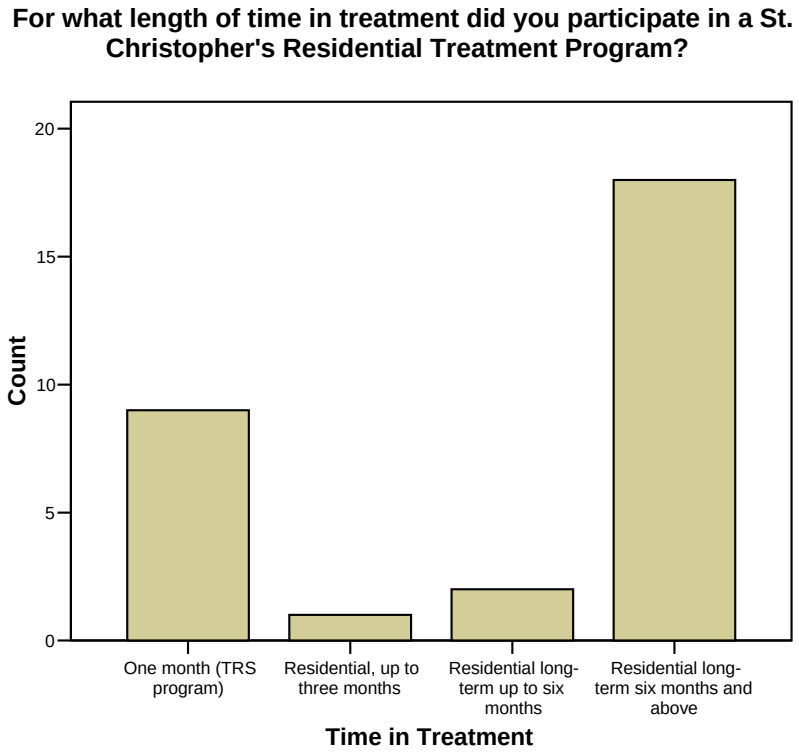

Figure 16: Length of Stay in a St. Christopher's Treatment Program

Of the long-term sample, 90% of respondents reported having been in residential long-term treatment lasting six months or longer, and 10% reported enrollment in residential long-term treatment greater than three months and less than six months. Ninety percent of short-term treatment respondents reported being in treatment lasting up to 30 days and 10 percent reported staying in residential treatment up to three months.

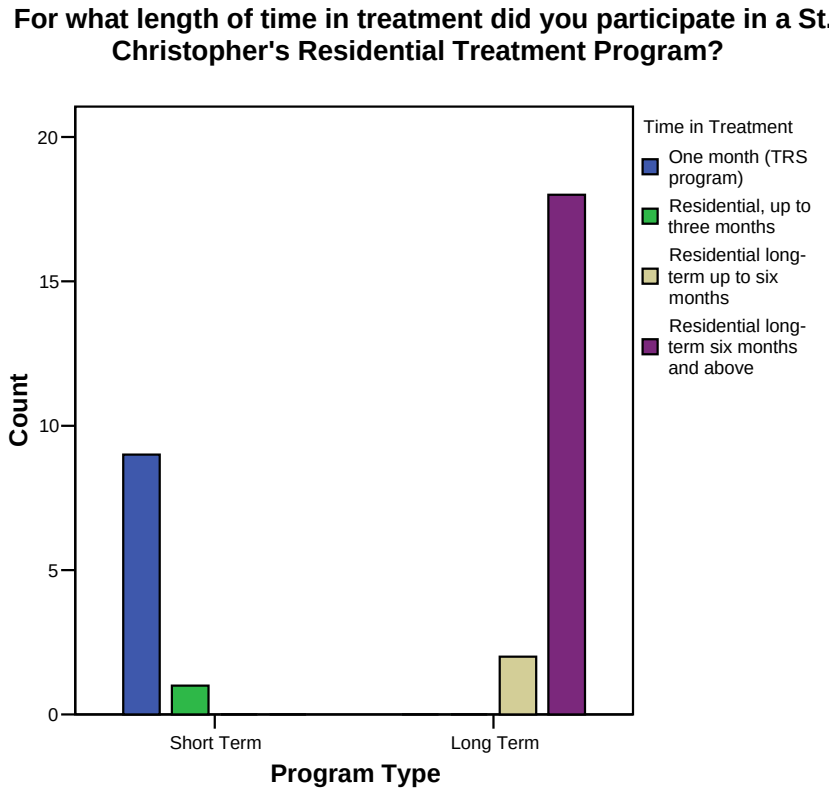

Figure 17: Length of Stay in a St. Christopher's Treatment Program by Treatment Modality

Questionnaire Component Nine: Was Assigned Treatment Protocol Completed

Respondents were asked if they had completed the St. Christopher's treatment program which they entered at the onset of drug treatment. The response was 76.67% reporting that they had graduated the program and 23.33% reported that they had not graduated the program. Of the participants in long-term treatment (n = 20), 90% reported having graduated their designated program and 10% did not complete their program. In contrast, only 50% of the short-term sample (n = 10) reported successfully completing their program.

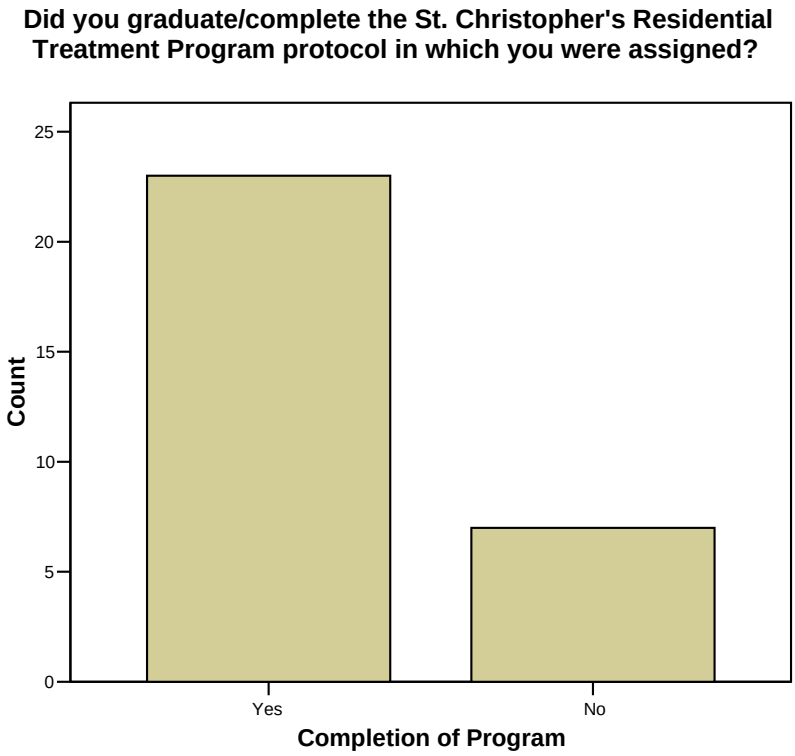

Figure 18: Treatment Program Completion Rate

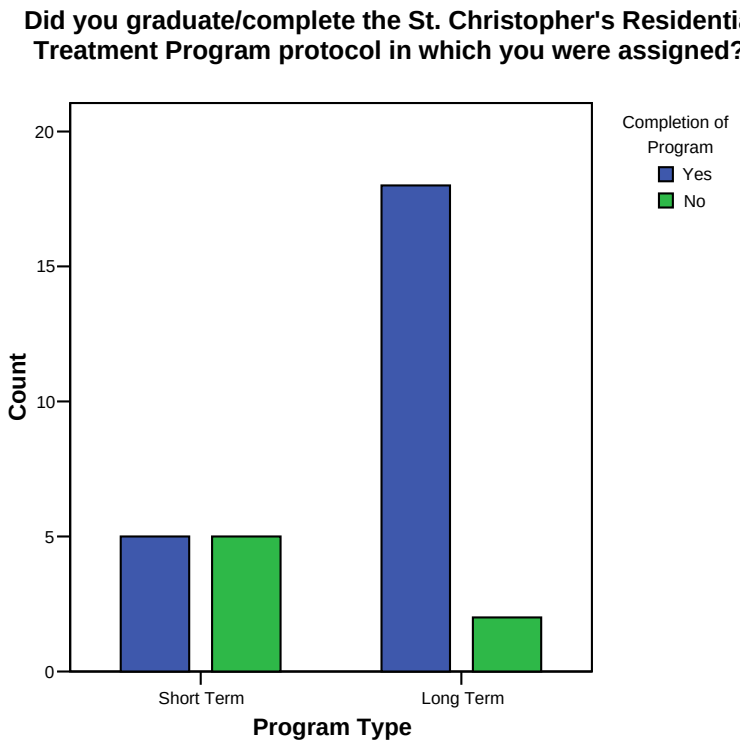

Figure 19: Treatment Program Completion Rate by Treatment Modality

Respondent Success and Sobriety Maintenance

The final questions in this study relate to the length of abstinence and sobriety maintenance exhibited by the respondents. Respondents were asked if they had been successful in achieving continued abstinence from alcohol and/or drugs. Additionally, the factors which had/had not contributed to their continued success and/or demise were also identified.

Questionnaire Component Ten: Abstinence Since Exiting a St. Christopher's Program

Respondents were asked about their continued sobriety since discharge from a St. Christopher's program and for the length of time being continuously abstinent.

Respondents answered: (a) yes, one to six months, (b) yes, six months to one year, (c) yes, one or more years, or (d) no.

Of the thirty, bimodal respondents (n = 30), twenty-seven (90% of the total sample) had remained abstinent from drugs and/or alcohol for one or more years. Only three respondents reported not having maintained sobriety; equating the additional 10% of the sample.

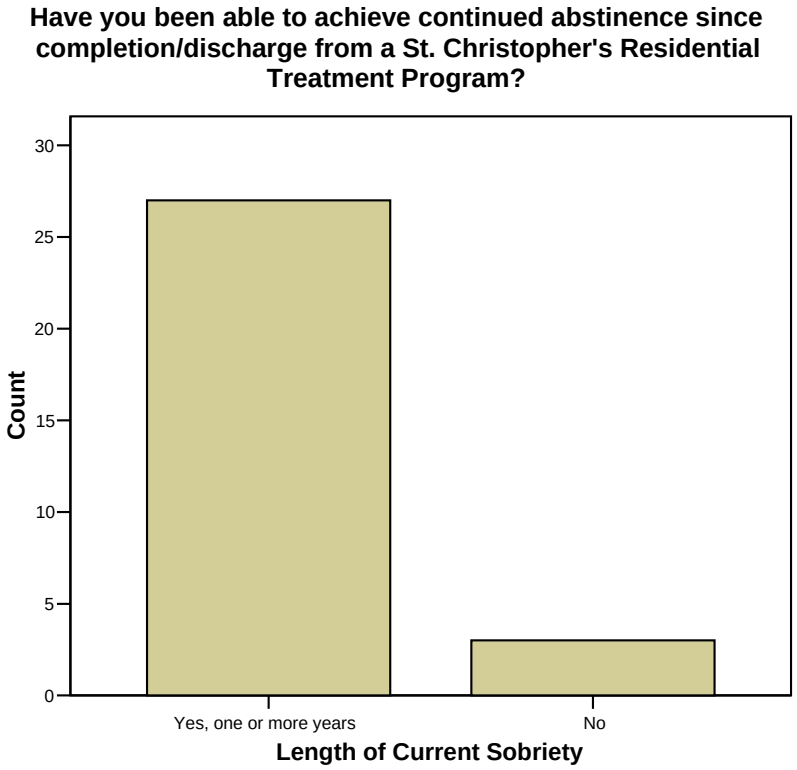

Figure 20: Length of Current Sobriety

Of the long-term treatment respondents 100% (n = 20) reported achieving sobriety for one or more continuous years. Of the short-term sample (n = 10), 70%

reported having maintained their sobriety for one or more years, while 30% reported having relapsed or fallen back into their addiction.

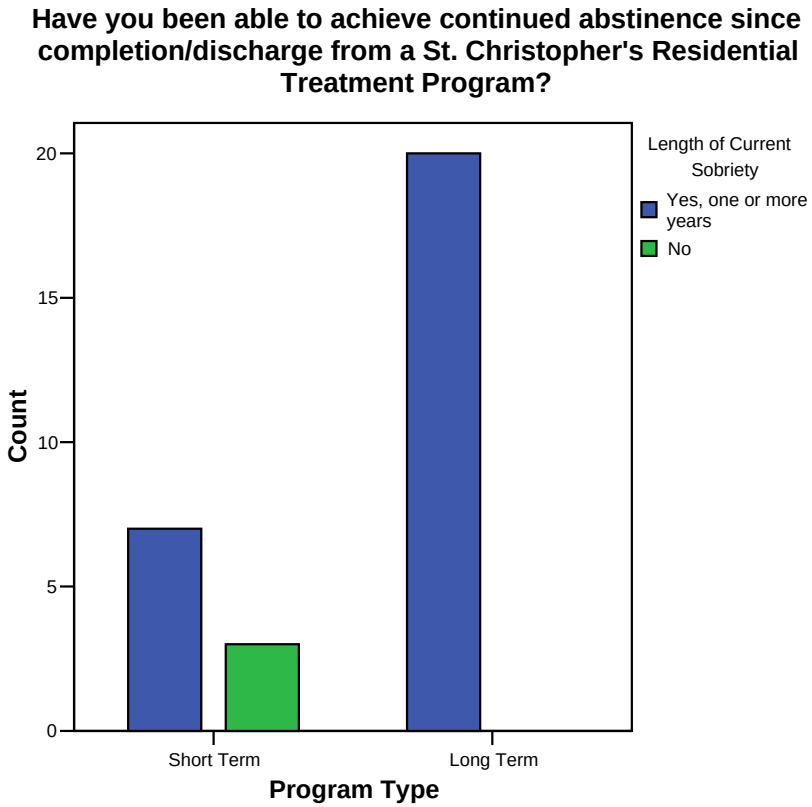

Figure 21: Length of Current Sobriety by Treatment Modality

Questionnaire Component Eleven: What Factors Contributed to Relapse

Respondents were asked what factors had contributed to their relapse (if relapse occurred) since exiting a St. Christopher's drug treatment program. Respondents answered: (a) I did not follow my aftercare protocol, (b) I stopped attending meetings of AA or other 12-step facilitated programs, (c) I ceased association with people in recovery and/or my 12-step sponsor, (d) I do not believe I had a drug/alcohol problem in the first place, or (e) list factors not included in the above description.

Of the short-term sample who reported having experienced a relapse (n = 3); each respondent attributed a different cause for his setback. One individual (10% of the total short-term sample) cited he had not followed the aftercare protocol prescribed by St. Christopher's. Additionally, another respondent cited, "I do not believe I had a problem in the first place," and the other respondent cited reasons not listed in the multiple choice format of the questionnaire.

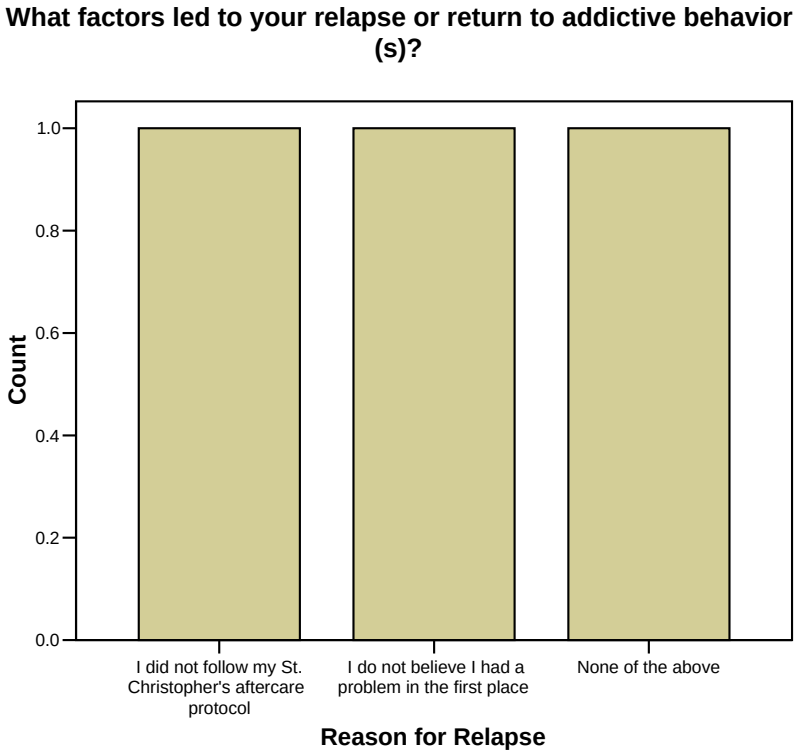

Figure 22: Reasons for Relapse

Again, because individual aftercare protocols vary, the following reasons for relapse in this segment are listed but not limited to: (a) discontinued association with a Twelve Step affiliated program and/or sponsor, (b) disassociation with fellow members in

recovery, and (c) falling back into “old” habits (associating with old friends not enthusiastic towards the idea of sobriety, going to places where recovery is not promoted, maintaining old behaviors as they relate to addiction). Hypothetically, “reasons not listed in the multiple choice format” may include but are not limited to: (a) discontinued association with counseling therapy, (b) ceased association with organized religion, and (c) the removal of additional spiritual principles not present in Twelve Step facilitated groups.

Questionnaire Component Twelve: What Factors Contributed to Continued Abstinence

Respondents were asked what factors had contributed to their continued abstinence since dismissal from a St. Christopher’s drug treatment program. Respondents answered either: (a) I followed my aftercare protocol, (b) I continue(d) attending AA or other 12-step facilitated programs, (c) I continue(d) association with people in recovery and/or my 12-step sponsor, (d) none of the above factors contributed to my abstinence. When asked which factors had most enhanced their sobriety, participants’ responses between the bimodal samples were as follows: 73.33% believed that continuing their aftercare protocol set forth by St. Christopher’s was the key component towards maintaining sobriety,; 13.33% stated continued association with Twelve Step groups (Alcoholics Anonymous, Narcotics Anonymous, etc) was their method; and 3.33% stated that continued association with people in recover and/or association with a Twelve Step sponsor afforded them continued sobriety.

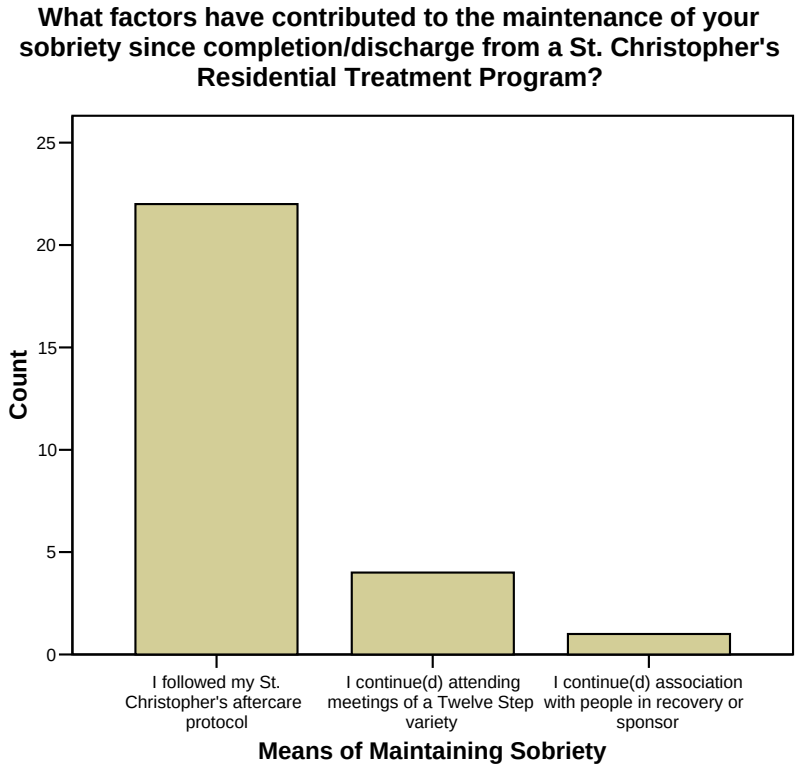

Figure 23: Sobriety Maintenance Factors

Because individual aftercare protocols in the St. Christopher's Residential Treatment Programs may vary, a hypothetical protocol may include: going to meetings of a Twelve Step variety, continued association with a Twelve Step sponsor, continuing to associate with members in recovery, staying away from triggers that could resort the individual to relapse (including people, places and things that may decrease the individuals likelihood of remaining abstinent), taking up new hobbies, and continuing to explore spiritual endeavors.

Of the long-term respondents who had achieved continued abstinence for one or more years (100% of the sample), all of them (100%) listed having followed their

aftercare treatment protocol as the primary enabler in achieving long-term abstinence. Of the short-term sample (n = 10), three individuals or 30% stated that continued Twelve Step meeting attendance was their primary tool for remaining abstinent; 20% reported following their aftercare treatment protocol as their key instrument; 10% said continued association with people in recovery and/or a Twelve Step sponsor; and 10% reported that none of the choices listed was their means of staying sober.

Potential alternatives to the choices listed above may include, but are not limited to: (a) affiliation with an organized religion, (b) spiritual endeavors outside of Twelve Step meetings and/or organized religion(s), and (c) alternative counseling therapies.

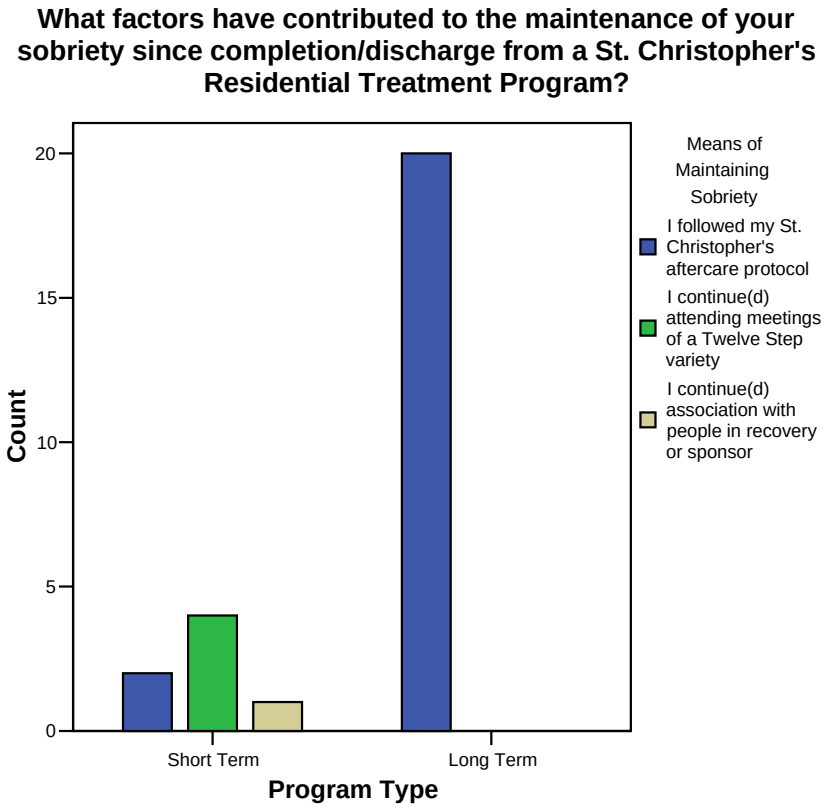

Figure 24: Sobriety Maintenance Factors by Treatment Modality

In addition to these questions, former clients at St. Christopher's were asked questions related to consumer satisfaction and retention. Clients were also questioned as to whether the St. Christopher's approach to sobriety was a vital component in their overall post-treatment success.

Questionnaire Component Thirteen: Overall Satisfaction with St. Christopher's Program

Respondents were asked to rate their perceived quality of care while a client in a St. Christopher's Residential Treatment Program on a scale of 1-10 (10 being the highest, 1 being the lowest). This included satisfaction with staff, program structure, and overall growth experienced while a client of the treatment program.

Overall quality of program infrastructure included but was not limited to: client satisfaction with staff, program structure, progression rate of spiritual, emotional, and mental health, etc. The mean modal response between the two groups was 8.33. The highest rating was a 10 and the lowest rating was a 3. The median was 9, standard deviation was 1.94, and the average absolute deviation from the median was 1.33.

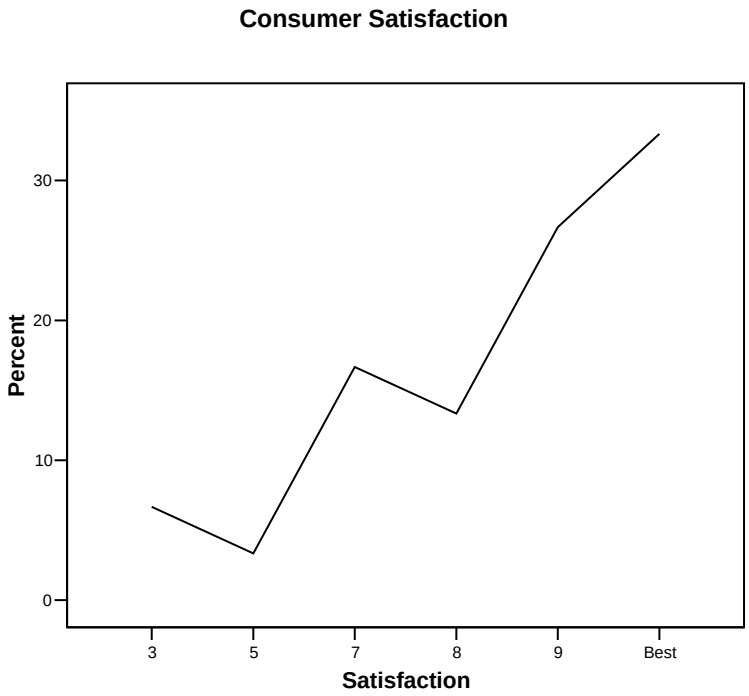

Figure 25: Overall Consumer Satisfaction with St. Christopher's

Of the twenty long-term respondents (n = 20), the mean response for overall client satisfaction was 8.80. The highest rating for the long-term respondents was a 10, while the lowest rating was a 7. The median was 9, standard deviation 1.06, and the average absolute deviation from the median was 0.800.

Of the ten short-term respondents (n = 10), the mean response for overall client satisfaction was 7.40. The highest rating for the short-term respondents was a 10, the lowest rating was a 3. The median was 8, standard deviation 2.88, and the average absolute deviation from the median was 2.40.

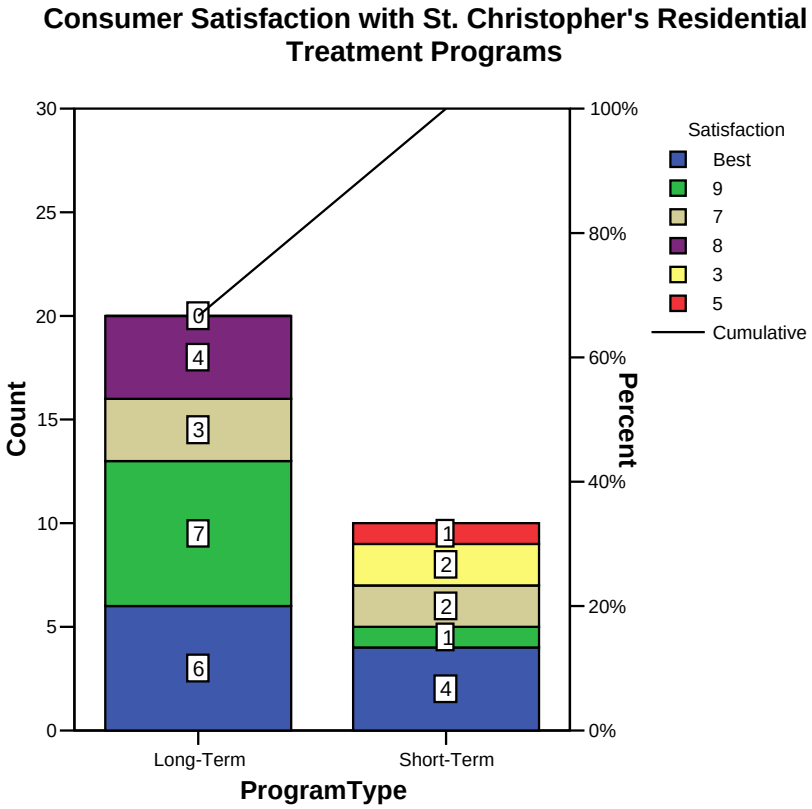

Figure 26: Consumer Satisfaction by Treatment Modality

Questionnaire Component Fourteen: Role of St. Christopher's in Continued Sobriety

Respondents were asked if they considered St. Christopher's Residential Treatment Programs to be the primary reason for their recovery, giving them the "tools" (education, resources in a recovery sense, etc.) to achieve continued sobriety? If they answered "Yes", they were asked to elaborate. If they answered "No", they were asked what could have been different in aiding their recovery.

All but two respondents of the modal sample (n = 28) responded "Yes," indicating that enrollment/graduation from a St. Christopher's Residential Treatment Program was the primary reason for their success upon dismissal. The majority of

respondents in both the long-term and short-term modalities responded that St. Christopher's (STC) provided a safe, structured environment to live and grow accustomed to life without the use of drugs and/or alcohol. Respondents' answers for this question varied and included comments such as: "STC provided me with living skills I did not have prior to long-term drug treatment."; "STC acclimated we with the tools and understanding of the Twelve Steps of recovery."; "STC gave me the time necessary to get honest with myself and those around me about my addiction."; and "STC gave me the pathway to a Higher Power."

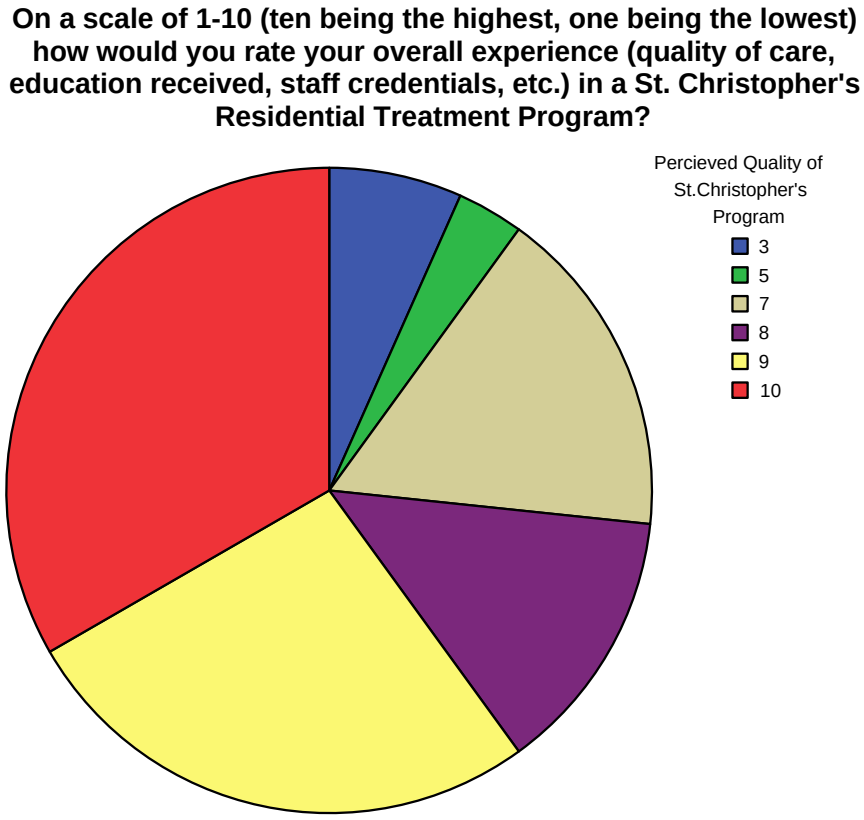

Figure 27: Perceived Overall Quality of St. Christopher's Treatment

IV. DISCUSSION AND RECOMMENDATIONS

Throughout history people have exhibited a tendency to overindulge in mood or mind-altering activities that impair sound judgment. Many of these activities, at one time or another, were deemed socially acceptable by most segments of society. However, drug use has caused enormous costs in terms of broken homes, diminished personal integrity, fatalities, and/or the consequences of addiction. In most cases, the need to use a substance has circumvented reality and the resulting addiction has created family and societal problems.

Substance dependence has traditionally been viewed as a crime as rather than as a disease. Medicaid restrictions and an inadequate allocation of federal funds have limited the availability of most drug treatment programs. However, people who desire effective drug treatment should be afforded this opportunity. Currently, only 15 percent of those who need drug treatment are able to get it (West, 1997).

The physical and emotional anxieties associated with daily living have increased since the mid 19th century. In the past, short-term stays in residential substance abuse facilities were the norm. With today's drug use and an ever-changing society, the need for quality, long-term care is essential. The physiological and psychological stresses of the 21st century call for extended time to heal the physical, emotional and spiritual wounds which are incurred in today's society. The resurgence of psychedelic drugs, such

as ecstasy and LSD, the introduction of synthetic pharmaceuticals, such as OxyContin™, and the continued use of methamphetamines, opiates, marijuana, and alcohol heighten the need for extended stays in drug treatment.

The National Survey on Drug Use and Health (SAHMSA, 2004) exposes several important questions in relation to the current state of drug treatment services in the United States. First, 27 percent of individuals needing drug treatment services are not receiving treatment. Is this due to a shortage of drug treatment or the inability of treatment centers to accommodate the increasing number of people addicted to drugs and/or alcohol? Second, 33 percent of this population is not able to afford drug treatment. If insurance companies are unwilling to provide financial supports, what treatment, if any, are these people receiving? Should they be disallowed services and continue in their addiction?

The United States government has promoted short, quick-fix drug rehabilitation, which has created a treatment modality of detoxification and short-term treatment facilities. The research clearly indicates that this approach is not working. The move towards shorter stays in residential treatment facilities has been manifested as the major source of care for individuals in need of drug rehabilitation primarily because of the rise in insurance premiums. Are these shorter stays more effective? Has our society or government decided that short-term treatment is the most efficient, effective standard of care for addiction treatment? Research suggests otherwise.

Imagine spending half of your lifetime addicted to a substance which controls the majority of your waking moments. Is it feasible to reap any kind of long-term change from a thirty-day treatment stay? It is possible. However, true change comes with time

and dedication to a program that works for the addict. After all, these are human lives which are at stake. Policymakers, legislators and those interested in changing the way our country views substance abuse is necessary if we are to come to a common ground in providing the rehabilitation that millions of Americans need but do not often receive**.**

Efficient, cost-effective drug treatment is something that is necessary if we are to curb this epidemic. As Americans, we have the opportunity to exercise many privileges which other cultures are not permitted: the right to free speech, freedom of choice and a government which allows us the liberty to elect and impeach leaders are a few qualities that characterize American society. As Americans, we have an obligation to help those in need of drug treatment services. Today, the United States faces a drug problem of mammoth proportions. With the continuing abuse of drugs and its resultant dependence, individuals need accessible, affordable, and effective care. They need it now.

Discussion

This study was conducted to determine the efficacy of long-term and short-term residential substance dependence treatment based on length of time spent in treatment. The results of this study indicated that the effectiveness of both long-term and short-term drug treatment is successful. However, when determining which drug treatment modality is most effective, individuals participating in long-term treatment appear to have higher levels of abstinence.

In this study, long-term treatment demonstrated a significantly higher level of continued sobriety among survey respondents. Attributed to this finding is the high correlation between the length of time spent in a long-term treatment program and the

respondents' current sobriety rate. Clients who participated in a long-term treatment program at St. Christopher's spent up to one year in treatment; by contrast, those in a short-term treatment program stayed between 28 days and three months. Respondents reported the following elements within the long-term program as significantly contributing to their sobriety: (a) opportunity to become active in Twelve Step facilitated groups, (b) potential to advance their sober living skills, and (c) option to become more aware of the spiritual component in their lives.

In terms of demographics, those in the 18–25 and 35–50 age groups made up the bulk of the research sample, accounting for seven of every ten respondents. Nearly 70% of respondents had not finished college, with the majority grossing less than $18,000 annually. Eight of every ten respondents lived in an urban, metropolitan area with a population of 200,000–1,000,000.

Fifty percent of the respondents reported that they had previously enrolled in a drug treatment program; respondents had tried to get clean and sober in the past and had experienced relatively minimal success. The majority of clients (80%) entering St. Christopher's did so either because of legal issues (arrests, probation, etc) or for "personal reasons" identified by the respondent that included the recognition that a drug/alcohol problem existed or that his life had become unmanageable due to the presence of alcohol and/or drugs.

Over half of the respondents cited alcohol as being their substance of choice, closely followed by a "conglomeration" of substances or poly-substance use as their primary reason for treatment intake. Over half of the respondents reported enrolling in the long-term St. Christopher's program, while one-third of those interviewed cited short-

term treatment as their mode of rehabilitation. Seventy-five percent of respondents completed either the short-term or long-term St. Christopher's treatment program. Significantly, however, only half of those in the short-term treatment modality actually completed the program. Higher rates of relapse were identified in those who exited the short-term treatment program.

Nearly three of every four respondents who reported indicated that the St. Christopher's aftercare program was the primary reason for their abstinence from substances. The significance of the aftercare protocols were due to the following requirements: (a) attendance at meetings of a Twelve Step variety, (b) association with a Twelve Step sponsor, (c) association with members in recovery, (d) avoidance of triggers that could cause relapse (including association with people, places and things that may decrease the individual's likelihood of remaining abstinent), (e) taking up new hobbies, and (f) exploration of individual spirituality. Each group showed a high incidence of continuing association with Twelve Step derived meetings.

All respondents surveyed rated St. Christopher's Residential Treatment Programs (on a 1–10 point scale) as 8.8 in terms of satisfaction with their treatment experience. Ninety-three percent of individuals surveyed reported, "Yes, St. Christopher's was the primary reason behind my success upon dismissal/graduation from treatment." Respondents rated the following elements of the program highly: (a) the structured environment, (b) the heightened awareness of spiritual principles, and (c) the facilitation of the Twelve Step philosophy, all which are hallmarks in St. Christopher's Residential Treatment Programs.

It is important to understand that of the thirty respondents who took part in this study, 50 percent had at one time or another previously enrolled in drug treatment programs and were unsuccessful. For St. Christopher's Residential Treatment Programs to have successfully facilitated the recovery of 90 percent of respondents for one or more, continuous years is truly remarkable particularly given current success rates of 30–40 percent (McCusker, Garfield, Lewis, & Frost, 1997). It would appear that the St. Christopher's program, staff and clientele have an understanding of the addiction process, counseling techniques, group and alternative therapies that have resulted in such a high success rate. This is highly instructive in terms of selection of a successful treatment program.

As with any self-reported data set, there are several limitations with this study. Because the data analyzed is from one treatment center, results from this study may not be generalized from individuals outside the St. Christopher's program of residential treatment. As with any survey research, one must be aware of the possibility that respondents who did take part in this study provided responses that were socially desirable. Furthermore, the inclusion of probing techniques may eliminate or reduce the likelihood of providing socially desirable responses

It is suggested that future research on the effectiveness of substance abuse treatment secure a larger sample than provided in this study. Future research should include a more diverse population of participants instead of a same sex sample; this study included only males.

Recommendations

Based on the results of this study, the following factors appear to be significant in the development of an effective drug treatment program. Long-term residential treatment programs appear to be more successful in attaining and maintaining sobriety than short-term programs for those in recovery. The following recommendations, however, are equally applicable to both short and long-term residential treatment programs:

1. Group and Individual Counseling: Treatment programs must include both group and individual counseling services. Group counseling is particularly effective for substance dependent persons, providing a natural support for individuals in the treatment setting. Individual counseling supports recovery and reinforces abstinence; rapport is easily built, allowing recovery to begin.

2. Twelve-Step Facilitation: In conjunction with group and individual counseling therapies, treatment programs should utilize the Twelve-Step model of recovery. The Twelve-Steps allow individuals to: (a) recognize and acknowledge their problem(s), (b) understand the destructiveness of substance dependence to their well-being, and (c) gain knowledge and skills necessary to manage the feelings and emotions that accompany substance addiction recovery.

3. Twelve-Step Meeting Attendance and Sponsorship: Treatment programs must encourage and support regular meeting attendance and sponsorship, both of which have proven to be integral in successful treatment outcomes. Twelve-Step meeting attendance increases the likelihood of a stable, abstinent recovery. Sponsorship provides support from a fellow Twelve-Step group member to guide the individual through recovery by sharing in previous experiences and providing an appropriate role-model.

4. Vocational and Social Skills Training: Treatment programs must provide vocational and social skills training. These services aid in the occupational and financial concerns facing the individual. Occupational training enhances the individual's capability to become financially responsible. Social skills training (sober living skills) assist the individual in achieving a balanced lifestyle, free from alcohol and/or drugs.

5. Aftercare Programs: Upon discharge, treatment programs must provide the structure of an aftercare program that reinforces sober living skills. Aftercare services, as well, must provide intensive relapse prevention training to foster continued abstinence from alcohol and/or drugs. Aftercare services must be available as long as the individual needs therapeutic support.

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APPENDICES

APPENDIX A

LETTER OF CONSENT

St. Christopher's

Residential Treatment for Chemically Dependant Males

3613 Government Street
Baton Rouge, LA 70806

(225) 387-1611
Fax (225) 343-5300

April 26, 2004

John Burgess, III
149 Cox Street, #203
Auburn, AL 36832

Dear John,

Please allow this letter to serve as a written agreement between St. Christopher's Halfway House of Louisiana, Inc. (St. Christopher's) and John Burgess for the purpose of putting together a study of success/failure in substance abuse treatment centers.

St. Christopher's agrees to gather specific information and provide to John Burgess. This data will be up to date as we will begin the first week of May, 2004 and we should be done in the first two weeks of June, 2004.

John Burgess agrees to analyze specific information provided by St. Christopher's. John Burgess also agrees to provide a copy of the final report of the study to St. Christopher's at no cost to St. Christopher's.

St. Christopher's and John Burgess agree to strictly adhere to any and all HIPPA regulations before, during, and after the gathering and analyzing of any and all data provided.

Dwayne J. Beason

John Burgess, III

4-26-04
Date

5-1-2004
Date

APPENDIX B

QUESTIONNAIRE

St. Christopher's Residential Treatment Programs Study

1) What is your age?
   a) 18-25
   b) 26-35
   c) 35-50
   d) 50 and above

2) What level of education had you attained pre-treatment?
   a) High School diploma/GED
   b) Some college but no degree
   c) Bachelors degree from a four year institution
   d) Post-bachelors (Masters, PhD, etc.)
   e) Other

3) What is your annual/yearly income?
   a) $18,000 and below
   b) $18,000-$25,000
   c) $25,000-$50,000
   d) $50,000-$200,000
   e) $200,000 and above

4) In what geographic segment/location do presently live in?
   a) Large metropolitan area (1,000,000 people and up)
   b) Average metropolitan area (200,000-1,000,000 people)
   c) Small metropolitan area (50,000-200,000 people)
   d) Large urban area (20,000-50,000 people)
   e) Small urban area (3,000-20,000 people)
   f) Rural area (below 3,000 people)

5) What was your primary reason for intake into treatment?
   a) Your own reasons and/or problems
   b) Court/legal issue
   c) Family pressure
   d) Other (Please list)

6) What was your substance of choice at intake?
   a) Alcohol
   b) Marijuana
   c) Amphetamines (including cocaine, crack, methamphetamine, speed, etc.)
   d) Hallucinogens (including LSD, Ecstasy, etc.)
   e) Opiates (including heroin and prescribed pain killers)
   f) A conglomeration of several listed above

7) Had you entered a substance abuse program before becoming a client with St. Christopher's?
   a) Yes (If Yes, how many programs and for what duration/amount of time in each? How long were you able to attain continued sobriety?)
   b) No

8) How long did you take part in treatment in a St. Christopher's related program?
   a) One month (TRS)
   b) Residential long-term up to three months
   c) Residential long-term up to six months
   d) Residential long-term six months and above
   e) Intensive out-patient

9) Did you graduate any respected program listed in Question 8?
   a) Yes
   b) No

10) Have you been able to achieve continued sobriety since discharge from St. Christopher's?
   a) If yes, one to six months?
   b) If yes, six months to one year?
   c) If yes, one or more years'?
   d) No

11) If you answered NO to question 10 what reason(s) potentially led to your relapse?
   a) I did not follow my after care protocol
   b) I stopped attending meetings AA or another form of 12-Step program
   c) I ceased association with people in recovery and/or my sponsor
   d) I do no believe I had a problem in the first place.
   e) If none of the above (please list)

12) If you answered YES to question 10 what means have you used to maintain your sobriety?
   a) I followed my after care protocol set forth by St. Christopher's
   b) I continue(d) attending AA or another form of 12-Step program
   c) I continue(d) association with people in recovery and/or my sponsor
   d) If none of the above (please list)

13) On a scale of 1-10 (10 being the best, 1 being the lowest); How would you rate the quality of care/growth endured while a client at St. Christopher's (including satisfaction with staff, program structure, etc.)?

14) Would you consider St. Christopher's to be the primary reason for your recovery; giving you the "tools" (education, resources in terms of recovery) to achieve continued sobriety? If yes, please elaborate. If no, what could have been different in aiding your treatment?