REVIEW OF RELATED LITERATURE

Effectiveness of Treatment for Alcoholism
Stress Tolerance and Abstinence
Social Support and Abstinence
Self-Help Groups and Abstinence
Spirituality and Abstinence
3.1. EFFECTIVENESS OF TREATMENT FOR ALCOHOLISM

3.1.1. Rate of Recovery in Treatment for Alcoholism

One basic question often asked in the context of addiction treatment is “how effective is the treatment for alcoholism”. The estimates on the outcome of treatment for alcoholism vary considerably depending on the subjects and the treatment facilities and procedures. They range from low rates of success for hard-core alcoholics to recoveries of 70-90 percent where modern treatment and aftercare procedures are used (Carson & Butcher, 1998).

In a study by Polich (1981) it was found that the course of alcoholism after diverse treatment methods was variable. According to the finding of the study only 7 percent of the total sample (922 males) abstained from alcohol use throughout the four-year period and 54 percent of the subjects continued to show alcohol-related problems. A positive aspect of the study is that 21 percent of the subjects abstained for one-year or more and 7 percent had abstained for six months.

Combined findings from several multi site studies suggest that in the year following treatment episode, about one in four clients remain continuously abstinent, and an additional one in 10 drink moderately and without problems. Mortality during this period was less than 2 percent. Even the clients who drink in the year following treatment abstained on 3 out of 4 days and the overall alcohol consumption was reduced by 87 percent on an average (Miller, Walters & Bennett, 2001).
3.1.2. Questions for Consideration

According to National Institute on Alcohol Abuse and Alcoholism (N.I.A.A.A., 2005) treatment outcome research is designed to answer six basic questions:

1) Is treatment better than no treatment?
2) Is treatment worse than no treatment?
3) Is one treatment better than another, if a treatment is effective?
4) Is a little just as good as a lot?
5) Does quality of life change because drinking has changed?
6) Are the benefits of treatment worth the cost?

Much of the early research suffered from lack of comparison groups, high rates of attrition and reliance solely on self-reports of alcohol consumption, all of which may have biased or skewed the results.

To assess treatment effectiveness present researchers use a variety of outcome measures, including patient self-reports, to gauge changes in drinking behavior, physical health status, psychological health status and social functioning. Since, the patients’ self-reports may be inaccurate some researchers recommend that the reports be verified by relatives or friends close to the patient and / or by periodic laboratory testing of urine, blood or breath alcohol levels.
3.1.3. Studies on Effectiveness of Various Methods of Treatment.

An 8 year multi-site study of the effectiveness of treatment approaches for alcohol problems, known as MATCH was completed in U.S. in 1998. The trial included 1726 participants and compared 12 sessions of Twelve Step Facilitation (T.S.F.), 12 sessions of Cognitive Behavioural Therapy (C.B.T.) and 3 sessions of Motivational Enhancement Therapy (M.E.T.). A number of client characteristics were measured at assessment and the outcome was evaluated at monthly intervals for 15 months. It was found that there were relatively few differences in treatment outcome between the treatments types’ in spite of the major differences in philosophy and procedures (Commentaries, 1990).

A study of effectiveness of addiction treatment conducted in India by Rajendran (1993) explored recovery rate in Alcoholics who underwent various combinations of behavioural treatment (relaxation training, aversion therapy, thought stopping, covert sensitization and assertiveness training).

Using multi-dimensional scale for drinking a sample of 55 Male alcoholics was assigned to four different groups such as physical, psychological, social and combined and administered relevant treatment programmes. Results revealed that the physical group reported highest positive outcome (67 percent). The psychological group reported 60 percent and the social and the combined groups reported 17 and 40 percent respectively Rate of relapse was highest for social groups (53) and physical group was the lowest (20 percent) (Rajendran, 1993).
Miller (1995) says “treatment outcome research confirms that there exists a large variety of treatment methods that appear to work in the short term (weeks or months). Only one method of treatment appears to be effective and to consistently work in the long-run (years to lifetime), namely abstinence based treatment when combined with regular, continuous and indefinite attendance at Alcoholics Anonymous meetings” (Miller, 1995).

Residential and day hospital rehabilitation programmes play an important role in the treatment of people with alcohol dependence, especially those with more severe and persistent problems. Project MATCH studied treatment matching for clients who had just completed a programme of conventional inpatient or day hospital treatment. The results of the investigation revealed no evidence for the superiority of any one method of treatment over another on the primary outcome measures. From base line through a 15-month follow up period the clients improved both in frequency and intensity of drinking.

An eclectic approach to treatment is more effective. The strategies like self control, stress management, community reinforcement, motivational training, covert sensitization and cognitive therapy attempt to improve social and marital relationships. Therapy, according to Rangaswami should relate to the stage of alcoholics’ problems at which intervention is carried out. Behaviour contracting with family or community aids in treating the addiction. For any treatment to be effective a combination of pharmaco-therapy, behavioural and psycho therapeutic approaches and social support is essential (Rangaswami, 1997).
In another matching study project MATCH comparing the effects of the three treatment methods the result was:

1. Association of involvement with Alcoholics Anonymous with better outcomes,
2. Modest support for matching clients to optimal treatments on the basis of pretreatment characteristics.
3. A finding that Twelve Step Facilitation was most effective than one or both of the other treatments without without additional psychopathology. Outpatients with high social support for continued drinking, and aftercare clients high in alcohol dependence;
4. A finding that Motivational Enhancement Therapy was more effective than the other treatments for outpatients high in anger and
5. A finding that Cognitive Behavioural Therapy was more effective than Twelve Step Facilitation for aftercare clients low in alcohol dependence (Ibid).

Clients with more severe dependence had better treatment outcomes with Twelve Step Facilitation Therapy and the lower scoring clients had better out comes with Cognitive Behavioural Therapy (Randall, Del Boca et al., 2003).

3.1.4. Dropping out of Patients

A common problem faced by professionals in the field of alcohol use disorder and substance abuse is the dropout of patients from
inpatient treatment. Saarnio and Knuuttila conducted a study on the risk factors for dropping out from inpatient treatment programmes for substance abuse. The objective of the study was to focus interventions aimed at improving the continuity of treatment. The study included a sample of 114 clients of a Finnish Treatment Institution. The main results of the study were the following:

1) Significant risk factors for dropping out of treatment are age of the subject, contemplating of change, attitude towards Alcoholics Anonymous (A.A.) / Narcotic Anonymous (N.A.).

2) Improvement in continuity of treatment with age and improved contemplation.

3) Improvement in continuity of treatment with positive attitude towards A.A. / N.A.

4) There is more positive attitude towards A.A. / N.A. for younger clients.

The conclusion is that interventions to prevent dropping out should be aimed at younger clients who are not positively disposed to A.A./N.A. and at older clients with inadequate contemplation of change (Saarnio & Knuuttila, 2003).

3.1.5. Duration of Treatment and Outcome

A study of the relationship between the length of treatment and effectiveness was done by Weisner and others (2003). The relationship of six-month treatment outcomes to abstinence five years post-treatment, and whether the predictors of abstinence at five years were different for those who were and were not abstinent at six months It was found that
abstinence at six months was an important predictor of abstinence at five years. Among those abstinent at six months predictors of abstinence at five years were older age, being female, twelve-step meeting, attendance, and recovery-oriented social networks. Among those not abstinent at six months, being alcohol dependent rather than drug dependent, twelve-step meeting attendance, treatment readmission and recovery-oriented social networks were predictors of abstinence at five years.

Another risk factor in connection with treatment outcome that studied was non-remission. A study on risk factors for non-remission among initially untreated individuals with alcohol use disorders was taken up by Moos R.H. and Moos B.S. The study identified risk factors for 1-year and 8-years non-remission among initially untreated individuals with alcohol use disorders and examined whether a longer duration of professional treatment or Alcoholics Anonymous increased the likelihood of remission moderated the influence of risk factors on remission status and reduced modifies risk factors.

A sample of 473 patients with alcohol use disorder was recruited at alcoholism information and referral centers and detoxification units. They were surveyed at baseline and one year, 3 years and 8 years later. At each contact the participants completed an inventory that assessed their alcohol related problems and personal characteristics and their participation in treatment and A.A. since the last assessment.
Significant results of the study were:

Longer duration of treatment and A.A. in the first year predicted remission and a decline in modifiable risk factors. Longer duration of A.A. increases the likelihood of remission more among high risk than among low risk individuals. The risk factors at one year were associated with 8 years non-remission; longer duration of additional treatment or A.A. was associated with a higher likelihood 8-year remission and further reduction in modifiable risk factors (Moos & Moos, 2004).

The importance of the duration of treatment for their alcohol related outcomes was substantiated in another study also by Moos and Moos (2004). The study was titled “The Interplay between Help Seeking Alcohol Related Outcomes: Divergent Processes for Professional Treatment and Self Help Groups.

A sample of alcoholic individuals was surveyed at baseline and 1, 3 and 8 years later. At each point participants completed an inventory that assessed participation in treatment and A.A. since the assessment and alcohol related functioning. Significant association of longer duration of longer duration of treatment with positive outcome is reported.

3.1.6. Factors Predicting Alcoholism Treatment Outcome.

Large amounts of information have been yielded by research regarding factors predicting individual variability in treatment outcome. There are lot of disagreements and inconsistencies in the findings due to factors like study design, the nature of the treatment programmes,
characteristics of the populations studied and the specific outcome variables measured (e.g. alcohol consumption, social adjustment etc.).

Factors predicting alcoholism treatment outcome as pointed out by various researchers are the following:

- Treatment is generally found to be effective when an individual realizes that he or she needs help. Thus one important treatment strategy aims at reinforcing treatment motivation in the early phase of the treatment.

- Professional treatment is found to be more effective than non-professional treatment for alcoholic problems (Brandsma & Colleagues, 1980).

- Nathan and Skinstad (1987) reported that younger alcohol patients appear to have better treatment prospects than older patients, while others have not found any main effect of age to be present (Rice et al., 1993).

- Women appear to have better results in the first year of follow up, while men have better results after the first 12 months (Jarvis, 1992).

- Severity of drinking problems and social adjustment predict poorer outcomes, though, severity of dependence at intake has not always been found to predict poorer treatment responses (Duckert, 1993).

- Psychiatric co-morbidity is an important factor predicting poorer treatment responses (Kranzier et al., 1996).
• Social support provided by family and friends is associated with better response to treatment (Booth et al., 1994).
• Other important patient variables are ethnicity, personality variables, readiness to change and motivation.
• Quality of individual therapists and their ability to engage the client are recognized as predictors of outcome.
• Length of stay in treatment and participation in various treatment components are often hypothesized to affect outcome (Copeland et al., 2000).

3.2. **STRESS TOLERANCE AND ABSTINENCE IN ALCOHOLIC PATIENTS**

3.2.1. **Stress and Alcoholism**

The term stress is popularity used to describe the subjective feeling of pressure or tension. But scientists mean by stress the objective physiological processes that are initiated in response to a stressor. Definitions of the term stress have varied across disciplines, theoretical orientations and levels of analysis, with examples ranging from:

• Events or experiences which are normatively or objectively associated with large adaptive demands (e.g. death, divorce etc),

• Individual’s subjective appraisal of their abilities to cope effectively with external demands (Carver, Scheier & Weintraub, 1989; Lazarus & Folkman, 1984) and
• The responses of specific physiological systems to homeostatic challenge (Cannon, 1932; Selye, 1952).

Stress disorders are based upon the slow developmental accumulation of psychological and physical stress responses throughout the life of the individual. Alcohol disorder includes in the list of disorders, which are stress related.

In stress coping and self-medication (Khantzian, 1989) models of substance abuse, drugs are thought to serve a coping function whereby they facilitate general mood regulation. There is reason to believe that some people use a diverse array of psychoactive drugs, including alcohol (Cooper, Russell, Skinner & Windle, 1992), as a means of regulating their mood and coping with stress. Several studies in animals as well as humans indicate that both acute and chronic stress play a role in the development of alcoholism and other drug use disorder and the precipitation of relapse in recovering alcoholics (Brady & Sonne, 1999).

Stress is commonly believed to be a factor in the development of alcohol dependence. But the association between drinking and stress is very complicated. In many researches to study the connection between alcohol and stress using population surveys based on self-reports or experimental studies, subjects report that they drink as a means of coping with stress, often in the absence of social support. If the stressor is severe and chronic, alcohol consumption will be greater (Pohorecky, 1991). But whether an individual will drink in response to stress seems to depend on many factors like genetic determinants, the individual’s usual drinking behaviour, his expectations regarding the effect of
alcohol on stress, the intensity and type of stressor, the individual’s sense of control over the stressor, the availability of social support etc. (Sadova et al., 1993).

Experiments with laboratory animals showed that alcohol relieves fear and inhibitions in approach-avoidance situations. It is found that social stress like crowding in rats has increased alcohol consumption. Experimental uncertainty is found to result in increased consumption of alcohol in primates (Orloff & Masserman, 1978).

Drinking takes place in response to chronic stress perceived as unavoidable. For example, rats chronically exposed to unavoidable shock, learn to be helpless or passive when faced with any new stress-including shock that is avoidable-and to demonstrate increased alcohol preference compared with rats that received only avoidable shock (Volpicelli, 1987).

In some individuals at certain doses alcohol may induce rather reduce the body’s stress response (Waltman et al., 1991). Studies in rats have demonstrated that administration of alcohol initiated physiological stress-response measured by increased levels of corticoid sterone (Spencer et al., 1990) and adrenaline (Rice et al., 1993).

According to Haleem (1996), exposure to stress is the most powerful and reliable experimental manipulation used to induce reinstatement of alcohol and drug use.
With regard to humans, research studies are done on predisposing personality characteristics regarding correlations of specific types of stress with the tendency to use alcohol as a response to stress. Thus, Finney, Smith, Skeeters, and Auvenshine (1971) found that alcoholics tend to have a high need for emotional support with craving for affection; they exhibit passive dependence, make aggressive demands, show impulsivity with easy decision making, yield quickly to temptation, and engage in efforts at control by repression, suppression, faith, and inspiration. In humans a low dose of alcohol improved performance of a complex mental problem-solving of a task under stressful conditions.

Pohorecky reviewed several studies in which researchers sampled individuals from areas affected by natural disaster. Alcohol consumption increased by 30 percent in the 2 years following a flood at Buffalo Creek, West Virginia. There was evidence of increased drinking in the towns surrounding Mount St. Helens following eruption of the Volcano (Pohorecky, 1991).

There are also studies, which indicate that acute experience low doses of alcohol may reduce the response to a stressor. Low doses of alcohol reduced the stress response in rats subjected to strenuous activity in a running wheel (Kalant, 1990).

Animal studies have demonstrated that stress increases alcohol consumption (Clark & Lister, 1992). For instance monkeys reared by peers—a condition more stressful than mother rearing—consumed twice as much alcohol as monkeys who were mother-reared (Higley, 1991).
Studies conducted in animals by Kreek and Koob (1998) have suggested that exposure to stress facilitates both the initiation and reinstatement of alcohol and other drug use after a period of abstinence.

Levels of self-reported stress in alcoholic patients were studied by Rajendran (1992). To 150 inpatient male alcoholics 43 items of life Events Stress Scale and Michigan Alcoholism Serenity Test were administrated. The sample showed a clear evidence of alcohol and related problems as measured by M.A.S.T.

In a study in drug addicts by Dubey Surendran (1993) the findings reveal that alcoholic subjects scored significantly higher on life stress events and hassles and lower on uplifts and social support.

Arnold, Vandana and Srivastava (1994) studied the stressful life events and social support in adolescent Marijuana users. 25 addicts were compared with 25 non-addicts on the Stress Scale for Adults and a Social Support Questionnaire. The main finding is that drug addicts experienced more stressful life events than non addicts and restored to less social dependence than non addicts.

Frustration pattern of individuals with opiate and alcohol dependence was studied by Gackwad and Parimu (1994). 20 opiate and alcohol abuses were compared with 20 non-abusers using Rosenzweiz Picture Frustration test. Significant differences were found between two groups in respect of aggression.
3.2.2. Neurobiological Connections Between Stress and Addiction

Researchers have also focused on an organism’s response to stress and the consequences of alcohol and other drug use and how it affects biological processes in the brain. Psychosocial stress alone can increase drug administration. Alcohol use was found in rats when placed in an unfamiliar group of animals while being protected from actual physical attacks by a screen grid (Ibid). Rats witnessing another animal receiving electric shock exhibited increased cocaine administration (Ramsey & Van Ree, 1993).

Alcohol administration increases in serotonin levels metabolism in animals (LeMarquand et al., 1994). Animals with low brain serotonin activity are high consumers of alcohol (Higley et al., 1998).

Studies have identified several neurological connections between the changes produced by stress and the changes produced by both short-term and long-term alcohol and other drug use (Piazza & Le Moal, 1998).

Researchers have focused on two neurological systems. One involves the organism’s hormonal and subsequent biological response to stress and the influence of those responses on the reinforcing effects of alcohol and other drug use. Thus certain studies centre on what is called a Hypothalamus-Pituitary-Adrenal (H.P.A.) axis. It has the following components:

- Corticotrophin-Releasing Hormone (C.R.H.) produced in the region called hypothalamus.
- Adrenocorticotropic hormone produced in the pituitary gland.
- Glucocorticoid hormones, namely, cortisol in humans and
- Corticosterone in rodents which is produced in the adrenal glands.

According to Piazza and Le Moal (1998), Glucocorticoid Hormone produced by adrenal gland is one of the central biological responses to stressful events. Studies have demonstrated that both acute stress and alcohol or cocaine administration can activate the H.P.A. axis. It is also found that agents that interfere with C.R.H. function also decreases sensitivity to environmental stress in animals and prevent some reinforcing effects of cocaine (Kreek & Koob, 1998).

The second neurological system involves neuro-transmitters which are believed to have a role in mediating the effects of alcohol and other drugs. The basis of this approach is the hypothesis that stress facilitates alcohol and other drugs self-administration by enhancing the activity of the neurobiological systems.

One explanation given for the connection between stress and other drug use is that stress modifies the motivational or reinforcing effects of alcohol and other drug use. Stress increases the activity of the dopaminergic brain systems, which are involved in motivation and reward, which also mediate alcohol and other drug induced rewarding effects.
Stress is reported to influence alcohol use both the initiation of alcohol use and reinstatement of alcohol use. The relationship between stress and alcohol use seems to depend on the timing of the exposure to a stressor and of the alcohol exposure. The stressful event and the alcohol exposure must occur within a short period in order that the acute stress to induce alcohol use. In experiments by Shaham and Stewart (1996) in which animals were exposed to acute stress by restraining them, alcohol use was facilitated only if the stressful situation preceded the exposure no more than 30 minutes. But when the animals were exposed to stress repeatedly for prolonged periods, the interval between the end of the stressful situation and the alcohol exposure did not seem to influence alcohol use. It was found that repeated stress can induce lasting modifications in neural pathways even in the absence of the actual presence of the stressor (Piazza & Moal, 1998).

Further, the finding that the brain’s serotonin systems affect the brain regions that mediate another stress-related reaction—the fear reaction—supports the notion that a neurobiological connection exists between stress and alcohol and other drug use and abuse (Brady & Sonne, 1999).

3.2.3. Occupational Stress: Risk for Alcohol Dependence.

Work environment is a major source of stress. As to how far occupational stress is related to alcoholism, Crum R.M. and others have conducted a scientific study. Their hypothesis was that individuals working in high strain occupations in jobs with high demands and low
control would be at greater risk for alcohol abuse or dependence than jobs with low demands and high control.

Occupational strains are of two kinds:

- Jobs with high psychological demands and low control and
- Those with high physical demands and low control

The investigators conducted a study among 18,571 subjects in the period between 1980 and 1984 from the household residents at the sites of the Epidemiological Catchments Area Program. Standardized interviews were conducted to assess whether they meet diagnostic criteria for alcohol dependence. The interviews were re-administered one year later to identify incident cases among the participants. Among the 57 participants included in study, there were 126 incident cases of alcohol dependence. Those employed in high strain jobs with high psychological demands and low control, were found to be 27.5 times more likely to develop alcohol dependence. Those employed in high strain jobs with high physical demands and low control, were 3.4 times at high risk for alcohol disorder (Crum, Muntaner et al., 1995).

3.2.4. Stress and Relapse.

Stressful experiences can contribute to reinstatement of alcohol use after a period of abstinence in animals and humans.

Rats fed alcohol for nine months and then abruptly withdrawn from alcohol acutely developed hyper excitability, rigidity, tremors and
convulsions. This hyper excitability will lead one to a requirement of sedation by alcohol or other drugs. But Herbert Peyser (1982) states that in order that this process may lead to the full-blown state of addiction, other factors such as genetic, sociological, psychological, and environmental must play their roles as well.

Alcohol abusers, who relapse, reported stressful experiences before drinking and more negative life experiences than recovered alcoholics (Billings & Moos, 1983).

Both discrete, stressful life events and stressors may play a role in the relapse of people recovering from alcohol use. But it is a fact that not all alcoholic patients relapse while facing stress. To explain the association between stress and alcohol, Brown and Colleagues (1990) have put forward the stress-vulnerability hypothesis. According to this hypothesis, alcohol and drug use in the face of severe stress is mediated by the presence or absence of both protective factors (e.g., homelessness and unemployment. There are findings that severe stress which occurred prior to and independent of alcohol use was related to relapse after treatment. In the study by Brown it was found that during a three-month follow-up period after treatment, patients who relapsed had experienced twice as much severe stress before entering treatment compared to patients who remained abstinent. Alcoholics reported susceptibility for relapse when feeling depressed (93 percent), nervous (90 percent), worried (88 percent), bad (78 percent), under stress (77 percent), and after failure (72 percent).
Brown and others (1990) have studied several aspects of stressful life event-alcohol relapse association. They first examined separately stressful life events that were independent of alcohol use and those related to alcohol use. Then it was examined whether more threatening stress of an acute or chronic nature was related to poorer drinking outcome after treatment.

Researchers have demonstrated that among abstinent alcoholics severe and chronic life stressors may lead to alcohol relapse. Brown and Colleagues studied a group of men who completed inpatient alcoholism treatment and later experienced severe and prolonged psychosocial stress prior to and independent of any alcohol use. It was found that subjects who relapsed experienced twice as much severe and prolonged stress before their return to drinking as those who remained abstinent. Those most vulnerable to stress-related relapse scored low on measures of coping skills, self-efficacy and social support. Brown and Colleagues (1995) note that stress may exert greatest influence on the initial consumption of alcohol after a period of abstinence.

Studies by Shaham and Stewart (1996) and Erb and others (1996) proved that a single stressful experience like an electric shock to the feet can induce resumption of drug use in an animal that had been previously taught to self-administer cocaine or heroin (Ibid). Studies found that both alcohol-dependent and non-dependent animals will increase their response for alcohol following a period of imposed deprivation (Heyser et al., 1996).
129 male patients in an Alcohol Treatment Programme at the San Diego Veterans Administration Medical Centre were included in the study. Within 48 hours of admission the participants completed a structured diagnostic interview (Schuckit, Irwin, Howard & Smith, 1988), which covered the patients’ social, family, and educational background and their alcohol, drug, medical and psychiatric history. The Psychiatric Epidemiology Research Interview Modified (Hirschfield et al., 1977) was administered by a trained technician during the 3rd week of the 4 weeks period of Alcohol Treatment Program.

Stressful life events and difficulties were evaluated on the psychiatric Epidemiologist Research Interview as modified by the National Institute of Mental Health Clinical Research Branch (Hirschfield et al., 1977). After the interview three raters reviewed all interview information and stressful life experiences were scored according to the Brown and Harris Contextual Rating System (Brown & Harris, 1982; Seligman & Meyer, 1970). Each stressor was evaluated according to its relatedness to or independence from the subject’s drinking and given an Alcohol Independence Rating. Items were classified into:

a) Occurrences independent of alcohol use or Alcohol Independent e.g. home was burglarized, or spouse was hospitalized for accident.

b) Occurrences related to the subject’s use of alcohol or Alcohol Related e.g. job loss because of drinking or hospitalization for injuries sustained while drinking.

c) Of the 111 men who completed the follow up 76 (68 percent) remained abstinent from alcohol and other drugs
for the entire 3 months. Of the remaining 35 men who used alcohol or drugs during the follow up period, 34 percent drank during only month, 32 percent drank during 2 months.

For the relapses the mean length of initial abstinence was 52.03 days and the average number of drinking days was 26.54, with a range of 1-90 days of drinking.

Alcoholics who abstained and relapsed did not differ during the pre-treatment period on the more general stress measures of total number of ‘PERI- M’ items, number of Alcohol Related stressful life events or Alcohol Independent stressors.

Alcoholics who relapsed within 3 months after treatment tended to report more alcohol related stressful life experience than abstaining alcoholics. It was also found that the alcoholics who returned to drinking within 3 months after treatment experienced significantly more post treatment alcohol-independent severe stress that occurred before initial relapse than abstainers during the entire 3 months period. 30 percent of those who relapsed experienced at least one alcohol independent severe stress on or before their relapse date compared to 16 percent of abstainers who reported such a stressor during the 90 post treatment days.

The findings of the study provide support for a bi-directional relation between alcohol use and psychosocial stress. Another important
finding is that severe stress (highly threatening life experiences) was associated with poorer drinking outcome (Sandra et al., 1990).

Research has shown that the association between elevated stress levels and relapse existed only when the subjects were interviewed after their relapse about the factors contributing to their relapse and not when stress levels were assessed before a relapse occurred. This suggests the possibility that rather than stress leading to relapse, relapse may have resulted in increased stress (Hall et al., 1990).

Studies have also shown that post-acute withdrawal symptoms may contribute to relapse for many people. According to Terence T. Gorski and Merlene Miller, “post acute withdrawal is a bio-psycho-social syndrome. It resulted from the combination of damage to the nervous system caused by alcohol or drugs and the psychosocial stress of coping with life without drugs or alcohol (Gorski, 1996).

3.3. SOCIAL SUPPORT AND ABSTINENCE IN ALCOHOLIC PATIENTS

3.3.1. Received Support and Perceived Support

The Convoy Model (Kahen & Antonucci, 1980) conceptualizes social support as a network of relations that moves with a person through life.

The term engulfs the mechanisms by which interpersonal relationship protects people from deleterious effects of stressful
environment. There is a wealth of psychological research literature demonstrating the positive and well-being effects of social support on health. There is strong evidence that social integration leads to reduced mortality risk and better health state (Cohen & Wills, 1985; House et al., 1998; Kessler & McLeod, 1985; Vaux, 1988).

Social support is sum of all the relationships that make a person feel as if he matters to the people who matter to him. It is defined as the “sum of the social, emotional and instrumental exchanges with which the individual is involved having the subjective consequence that an individual sees him or herself as an object of continuing value in the eyes of significant others” (Glass et al., 1993).

According to Coff (1996), social support refers to the information leading an individual to believe that one is cared for, loved, esteemed and valued and that he belongs to a network of communication and mutual obligation’.

There is distinction between received and perceived social support. Received social support represents the behavioural component of social support, as it requires activation in particular interpersonal transactions (Schetter & Bennett, 1990). Received social support has been shown to be less reliable in buffering against the adverse effects of life stress on psychological health (Cohen and Wills, 1985) and less predictive of health and well-being (Kessler & Mc Leod, 1985; Turner, 1992; Vaux, 1998).
Perceived social support represents the subjective perceptions of the extent to which social network members are available to provide social support (Mckay, 1984) and represents the cognitive component of social support.

Social support approach focuses on the subject's need for emotional support from family and friends and it lays emphasis on the specific help these people can provide in reducing interpersonal conflict and stress. It is also argued that the individual should assume an active role in structuring beneficial social support for him by adopting certain ways like leaving the company of alcohol using friends and learning to say no to drugs. Adequate appraisal of the issue of social support and incorporating the social support approach in treatment may help in moving friction and improving the interpersonal interaction between the drug user and the society. This may help the drug user and the alcohol user to maintain abstinence and new social role and respect in society.

A study by Dubey Surendran (1993) found that drug addicts were found to have lower score in social support.

3.3.2. Health Benefits of Social Support

Several studies were undertaken by researchers to assess the effects of social support on medical success.

A study entitled “Emotional support and survival after myocardial infarction was carried out during 1982-92. The study was under taken by medical and social researchers at the Yale University
School of Medicine’s Department of Epidemiology and Public Health. 194 elderly people, participating in a long-term study of ageing and were hospitalized for myocardial infarction.

A significant finding was that the level of emotional support reported by the elderly before their myocardial infarction was strongly associated with subsequent risk of death during the year following the attack (Berkumon, Leo Summers et al., 1992).

Two sets of another study are worth mentioning. The first of these was entitled “The Quality and Quantity of Social Support Stroke Recovery as Psychosocial Transition” conducted by researchers at the Department of Epidemiology and Public Health at Yale University of Medicine and at Duke University Department of Sociology.

This study attempted to view the recovery process as a psychosocial transition involving abrupt and relatively permanent changes in life patterns occurring over a short period of time. The researchers investigated the differential effects of three kinds of social support – the emotional, instrumental and informational support-on adaptation and recovery outcomes. Forty four patients were followed for six months after stroke, with all the appropriate controls and research techniques.

All the three types of social support were found to be significantly related to a patient’s recovery of functional capacity.

The study also focused on the relative effects of different kinds of social support. It was found that patients who had the most severe
strokes but the greatest level of emotional support had the most dramatic improvement. Instrumental support was most closely associated with improvement if it was provided only in a moderate quantity. Too much instrumental support would undermine the patient’s motivation to do things by him. Informational support however was found to be more effective when the stroke was low (Glass et al., 1992).

The second study concerns recovery from stroke. Physicians and social science researchers at Yale University School of Medicine, Duke University School of Medicine and Health Service Research Field Program undertook the study entitled “the Impact of Social Support on Outcome in First Stroke”. The venues were Veterans Administration Medical Center at Durham, North Carolina, and the University of North Carolina School of Nursing.

46 surviving patients were followed for six months after their strokes. Recovery was evaluated by using repeated measures of functional status as indicated by the widely accepted Bethel Index of the Activities of Daily Living. The social support perceived by the patients was measured at one, three and six months after the onset of the stroke. Significant differences were found across the spectrum of levels of social support with a marked three-way interaction between stroke severities. Social support had a 65 percent better outcome in terms of functionality as measured by the Bethel index. The study concluded that high levels of social support were associated with and more extensive recovery of function after a stroke, and that social support may be an important prognostic factor in recovery. The study also speculated that
socially isolated patients may be at particular risk for a poor outcome (Glass et al., 1993).

The value of the opportunity of a patient to consult with someone about a particular decision regarding his life after a heart attack without having to leave home in providing reassurance and encouragement and eventually contributing to faster recovery is an accepted principle. This facility is multiplied by the modern communications technology “providing medical treatment at a distance and sharing knowledge world-wide. “Health on the Net Foundation” is a venture which attempts to proceed step by step to this potential realm of health care for the Great Electronic Messiah” (Gordis, 1996).

3.3.3. Social Support and Abstinence in Alcohol Dependent Patients

Booth and others have suggested that being perceived by others outside the treatment setting as capable / “worthy” may enhance the self-confidence of the alcohol user and may help him in overcoming the alcohol problem (Booth et al., 1994).

Social support is the “missing link” that allows some alcoholics to quit on their own without any formal treatment. Social support can be provided by contact with recovering people, access to self-help groups, and a family that helps the drinker to readjust to life without substances. Social support does not mean that the family should keep on protecting the alcoholic when he or she is in trouble; it means creating enthusiasm in both the drinker and the family that a life without alcohol is possible (Nelmark & Conway, 1994).
A group of 16 relapsed alcohol dependent subjects were compared with 20 matching subjects who had stayed abstinent after two months of treatment with respect of certain psychological aspects. Results show that subjects in the relapsed group experienced more interpersonal conflict with spouse and misunderstanding with family members. The abstinent group had a higher “seeking social support” (Singhal, Suchithra, & Nagalakshmi, 1994).

The impact on the family interactions in perpetuating or ameliorating the problems created by drug dependent patients on the family, have an effect on the initiation of, perpetuation of and recovery from treatment; and the patient’s clinical course and outcome (A.P.A., 1995).

In a study on heroin dependent persons, family conflict and peer deviance were found to significantly predict injection frequency and illegal activity during treatment (Knight & Simpson, 1996). This suggests that substance abuse can influence social support and social support, in turn, can influence the substance abuse problem.

A study conducted by scientists at the Palo Alto Veterans Affairs Health Care System and Stanford University School of Medicine throws light into the process how social support works for the addict. The individuals who became involved in self-help groups developed richer friendship networks, and reported coping more effectively with stress.

Friends’ support for abstinence had much more powerful effect on the course of individual’s recovery than did general friendship. If an
individual’s friends do not use substances, incentives to use them are removed from the social environment and positive social activities that don’t involve substance abuse become more available. According to Humphreys, the head of the study, “positive cycles develop among self-help group members over time, resulting in active coping, richer social networks, and reduced stress (Humphreys, 1998).

Perceived social support from family, friends and other recovering drug users can play a vital role in preventing and delaying relapse according to McMohan (2001) and Malhotra and others (2001).

McMohan (2001) notes that perceived social support from family, friends and other recovering drug users can play a vital role in preventing and delaying relapse.

Malhotra A, Malhotra S. and others (2001) have demonstrated that support from family, friends and other recovering alcohol users can play a vital role in preventing and delaying relapse. But it is required that the individual should assume an active role in structuring beneficial social support for himself by adopting certain ways like leaving the company of drug using friends and learning to say ‘no’ to drugs. Incorporation of social support in treatment may help to remove friction and improve the interpersonal interaction between the drug user to maintain abstinence and a new social role and respect in society.

The positive effect of social support on health in alcohol and drug dependent patients were studied by, Dhawan, Malhotra and Prakash (2002). On the basis of clinical impression it was hypothesized that
social support is low in heroin and alcohol dependent patients. The study was undertaken to assess and compare the perceived social support among treatment seeking alcohol dependent and heroine dependent patients. The significant finding is that social support influences motivation, treatment compliance and outcome in alcohol dependent and heroine dependent patients. It was also found that social support in heroine dependent patients was poorer than in alcohol dependent patients.

In a study involving a sample of 367 man and 288 women seeking treatment at various sites of representative public and private alcohol treatment programmes in a Northern California County, the influence of social network was investigated. The subjects were interviewed at intake and re-interviewed one and three years later to collect information regarding alcohol consumption, dependence symptoms, social support for reducing drinking etc.

It was established that social support received from A.A. members was consistent contributors to abstinence 3 years following a treatment episode. The supportive network was found to have enduring effects for an abstinent life style. Significant predictors of abstinence included A.A. involvement in the previous year, percentage of heavy problem drinkers in the social network, number of people encouraging alcohol reduction and A.A. based support for reducing drinking. An increase in A.A. participation between 12 and 36 months post-treatment increased the odds of abstinence at 12 months. Significant mediator of A.A.’s effect on abstinence was the number of A.A.-based contacts (Bond, Kaskutas & Weisner, 2003).
Weisner, Delucchi and others (2003) undertook a study to examine how informal support and community services influence the course of alcohol disorders. Alcohol dependant adults (N=600) and problem drinkers (N=900) were identified through probabilities surveys in the general population and in public and private treatment programs. Participants were interviewed at baseline and again 1, 3 and 5 years later. Models controlling for demographic characteristics, problem severity, community services and recovery-oriented social networks were estimated, using a multilevel mixed model to predict alcohol consumption overtime. A significant result was that reduced drinking overtime was observed for both alcohol dependants and problem drinkers. Recovery oriented social networks and A.A. participation predicted decreased consumption for both groups. Contacts with medical, mental health, welfare and legal systems were predictive of reduced consumption for problem drinkers. In the dependent group only contacts with mental health agencies marginally predicted decreased consumption. The study suggests the need of developing mechanisms for identifying problem drinkers and for facilitating the use of self-help groups and positive changes in the social networks.

3.4. SELF-HELP GROUPS AND ABSTINENCE IN ALCOHOLIC PATIENTS

3.4.1. A.A. Participation and Abstinence

There are numerous research studies to establish the role of self-help groups like Alcoholic Anonymous in recovery of alcoholic patients.
In a landmark study Vaillant (1983), substantially demonstrated that A.A. attendance was the common variable in determining positive long-term outcomes in the treatment for alcohol disorders.

Galanter, Castaneda and Salamon (1987) in a study of 3 different residential programs, which used a self-help component, concluded that self-help peer-led therapy can yield improved cost effectiveness and clinical outcome in hospital based alcoholism treatment.

In a meta-analysis Emrick has stated that those who combined A.A. with other forms of treatment seemed to do as well as or better than those who went to A.A. alone. He discovered that among the alcoholics who became long-term active members of A.A., nearly 50 percent enjoyed several years of total abstinence. But he also found that A.A. was not suitable for groups of drinkers with low rates of dependency who wished to follow a controlled drinking approach.

Attending A.A. during or after treatment is more positively related to treatment outcome than attending A.A. before treatment. Majority of results show that patients who attend A.A. during or after other treatment for alcoholism enjoy better outcome status (Emrick, 1987).

There are also different opinions regarding the effectiveness of A.A. Regarding the role of A.A. on the outcome of treatment of alcohol disorders there are also negative views.
Dr. Alan Ogborne of the Center for Addiction and Mental Health cautions that A.A. and other 12 step groups are not to be considered as a fix all answer to the multiple problems often associated with addiction. Stanton Peele (1989) suggests that the A.A. message is dangerous because it implies that we don’t have the will power to change without help from others.

Studies by Emrick Chad and others have examined the relationship between successful A.A. affiliation and the level of alcohol dependency. It was found that individuals who benefited most from A.A. based intervention had a more rigid thinking style, authoritarian attitude, poorer psychological adjustment, consume alcohol in a wide variety of situations, place value on religion and have a belief in God’s role in their lives, thus placing religion and/or God in an active sense in their lives, and had childhood experiences in which adults engaged in alcohol and other drugs (Emrick, Chad et al., 1993).

The results of two different comprehensive meta analyses on A.A. literature found that there was a positive relationship between drinking outcome and A.A. involvement especially when A.A. involvement arose out of a formal treatment programme. There was also a positive correlation between continuing abstinence and A.A. involvement that was initiated after the completion of a formal treatment program. Important to the eventual abstinence of these persons was the introduction of self-help during the treatment process (Emrick, Tonigan, Montgomery & Little, 1993).
Different aspects of the long-term recovery from Alcoholism through A.A. were brought out by Collins (1993) in a review. According to him triennial membership survey of A.A. have shown effectiveness in treatment by helping the alcoholic patients through the difficult period of first year of sobriety, to deal effectively the problem of denial, ensuring group support etc.

Until the mid 1990’s there was still a very active debate on the value of A.A. as a treatment option. But since then a growing body of evidence has come out in support of incorporating A.A. with formal treatment to increase the probability of a successful outcome. Dupport and Shiraki (1994) and Miller (1995), conducted reviews of the existing evaluation literature. Both studies concluded independently that 12 step programs play an essential and integral role in assisting in the recovery from addictive disorders for many people.

There is a study which suggested that drinking outcomes were unrelated to the attendance, at A.A. after treatment but related to the extent of involvement. Involvement includes working programme steps and A.A. recommended activities (Montgomery, Miller et al., 1995).

Researchers have concluded that Alcoholics Anonymous has been able to reach and assist different ethnic groups (Caetano, 1993) and subjects of different economic and educational characteristics (Miller & Berinis, 1995).

According to Chappel (1997), 12 step programmes are the most effective means known to enable alcoholics and drug addicts to remain
sober and continue normal adult growth and development. Affiliations with A.A. or N.A. allows for broader solutions for many social problems that are either partially or wholly caused by social disintegration.

As to the mechanism of how A.A. contributes to the positive outcome Humphreys and Noke (1997) have a significant finding. They found that 12-step involvement after formal treatment helped individuals develop friendships, outside their drug using circle (Humphreys & Jennifer, 1997).

In a one year longitudinal study among a sample of 2, 337 male substance abuse patients 57.7 percent of whom became significantly involved in 12 step activities it was found that 12-step group involvement after treatment predicted better general friendship characteristics (e.g. number of close friends) and substance abuse-specific friendship characteristics (e.g. proportion of friends who abstain from drugs and alcohol) at follow-up (Humphreys & Noke, 1997).

Meta analysis of controlled experiments, reviewed by Konacki R.J. and Shadish W.R. titled “Alcoholics Anonymous Work: The Results from Meta analysis of Controlled Experiments” describes that A.A. at best does no better than alternatives and in some cases may do significantly worse. The reviewers also noted that very little good research on A.A. exists. But it was commented that the review lacks certain methodological detail and publication bias exists (Konacki & Shadish, 1999).
The role of Alcoholics Anonymous and network support for abstinence relation to their effect on changes in states between follow-ups were studied by Kaskutas Bond& Weisner (2003).

The study was conducted at 10 representative public and private alcohol treatment programmes in a North Zone California County. It involved 367 men and 288 women seeking treatment. They were interviewed at intake and re interviewed 1 and 3 years later. A significant conclusion of the study is that A.A. involvement and the support received from A.A. members were consistent contributors to abstinence 3 years following a treatment episode.

One of the significant findings of patient treatment matching study (Project MATCH), already cited earlier, is the association of involvement with Alcoholics Anonymous with better outcomes (Miller & Longabaugh, 2003).

A positive correlation between Alcoholics Anonymous involvement and better alcohol related outcomes has been identified in research studies. But a causal relationship between the two is a different issue, a core issue of debate. This was studied by Mckellar et al. (2003) with a sample of 2319 male alcohol dependent patients.

An important finding of the study was that one-year post treatment levels of A.A. application predicted lower alcohol related problems at 2 year follow up, whereas level of alcohol-related problems at one-year did not predict A.A. affiliation at two-year
follow-up. It was also shown that the effect was not attributable to motivation or psychopathology (Mckellar et al., 2003).

Fiorentine and Hilhouse (2003) have conducted a study to answer the question why participation in 12-step programmes is associated with cessation of addictive behavior. The hypothesis of the study was that high level of participation in treatment and 12 step-programmes would promote abstinence because these activities reinforce the notion that controlled use is not possible for dependent alcohol and drug users. The finding of the study involving 356 subjects supported this hypothesis partially. Frequent counseling participation, treatment completion, and weekly or more frequent participation in twelve-step programs etc. also were found to promote abstinence.

Alcoholics Anonymous and other 12-step traditions offer a set of attitudes, beliefs, and behaviours that are instrumental for change in the patients. A very common problem with alcoholism is the denial. A.A. enables the patients an unconditional acceptance of alcoholism, an unshaken belief in the concept of alcoholism as a disease, and the support the group offers. The pathway to recovery through 12 steps is described as involving these aspects.

A longitudinal study of 30 month-long attendance of self help group in a large sample of adults conducted by Kissin and others (2003), has established association between long term attendance in self-help groups with lowest alcohol and other drug use at follow-up and non-attendance linked to highest use. Result suggested that both self-help and formal substance abuse treatment are independently
associated with reduced alcohol and other drug use, and self help participation is associated with treatment.

A cross sectional survey was conducted in community based members of an individual A.A. group using open ended and closed questions. A notable result of the study was that successful A.A. membership is associated with sobriety and longevity of membership, attendance at A.A. meetings, and commitment to twelve-step work, and with sobriety and longevity of membership (Gabhainn, 2003).

A longitudinal study, involving 150 alcoholic patients in an inpatient treatment programme, was conducted by Gossop et al. (2003). The Participants were interviewed at admission, and 6 months following departure. The following results were brought out. Significant improvement in drinking behaviours (frequency, quantity and reported problems), reduction of psychological problems and improvement in the quality of life were reported. Frequent A.A. attendees had superior drinking outcomes to non-attendees and infrequent attendees. Those who attended A.A. on a weekly or more frequent basis after treatment reported greater reductions in alcohol consumption and more abstinent days.

In a study by Moos and Moos (2004) among 473 individuals with alcohol use disorders on 1 year and 8 years outcomes it was found that individuals who affiliated with A.A. quickly and participated longer had better 1 year and 8 years alcohol related outcomes than individuals who did not participate. Individuals who continued to participate, and those who continued longer, had better alcohol-related outcomes than those
who never participated. In other words frequency of participation was associated with higher likelihood of abstinence (Moos & Moos, 2004).

As to what exactly the specific nature of Alcoholics Anonymous an analytical study was conducted by Cloud and others (2004). Using Alcoholics Anonymous Involvement Scale the salient features of Alcoholics Anonymous were identified. By analysis using a stepwise regression three core items predicting recovery were identified in the study. They were: A.A. attendance, sum of steps completed, and identifying self as an A.A. member.

Another study investigated the hypothesis that participation in self-help groups reduces mortality risk. 375 individuals who participated in the study were patients from Alcoholism Treatment Programme. After discharge from the alcoholism treatment and a complete explanation of the study, subjects decided whether to attend a self-help group or not. The self-help group comprised of 208 subjects and non self-help group comprised of 167 subjects. Outcomes were evaluated with regard to death during follow up for a period of 24 years. Deaths were confirmed for 47 non-self-help group subjects and only 5 for self-help group subjects. The most important predictor of prognosis for alcoholics was found to be attending self-help group (Masudoni, Uchiyama & Watanabe, 2004).

Rudolf H. Moos, senior research career scientist for the Department of Veterans Affairs Health Care System in Palo Alto, California, attempted to examine the longer-term outcomes of treatment. 362 individuals (193 females, 169 males) who had initial
contact with alcoholism treatment system for their alcohol use disorder. Participants were asked about their subsequent participation in A.A. and/or treatment, as well as their alcohol related functioning, at baseline (initial contact) and then again at one, three, eight and 16 years later. The study is reported to have the following significant findings:

1. Individuals who enter A.A. relatively quickly after initialing help seeking either alone or in conjunction with treatment are more likely to participate in A.A. in the subsequent 15 years and participate in A.A. more frequently for a longer duration.

2. A long duration of participation in A.A. was associated with a higher livelihood of continuing remission to 15 years later.

3. Individuals who obtain professional treatment and participate in the first year after initiating help-seeking are more likely to achieve remission for up to 15 years later than are individuals who obtain professional treatment alone.

4. Individuals who achieved remission but who discontinue participation in A.A. are at increased risk for relapse; individuals who have not stopped drinking and who discontinue participation in A.A. are more likely to continue drinking (Moos, 2005).

In a study Rogerweiss M.D., Clinical director of the Alcohol and Drug Abuse Treatment Programme, and Colleagues, involving 487 cocaine dependent patients found that merely attending meeting did not predict lower drug use. However, active participation (e.g. talking with a sponsor, working on a step, reading A.A. literature, making coffee etc.) at the meetings was significantly predictive of decreased drug use. The result also indicated that non-attending active participators who
consistently participated in 12-step activities but inconsistently attended meetings achieved outcome comparable to those who participated or attended meeting regularly (Quoted by Belmont, 2005).

3.4.2. Combining A. A. Attendance with Psychotherapy

An important finding of the researches on the effectiveness of A.A. participation is that A.A. attendance when combined with different psycho-therapeutic techniques brought more result.

Alcoholism is viewed as a disorder of the self. It is related to the failures in establishing healthy attachment of the child to parents. These difficulties hinder the child’s separation and individuation from the parent, making the child susceptible to developing a co-existing disorder of self.

Masterson’s approach is an effective technique to treat the disorder of the self. This technique of treatment can be employed in combination with Alcoholics Anonymous. Sachs describes the positive result of this combination. According to him awareness of the theoretical approach of Masterson’s technique namely ‘Objects Relation Treatment Approach’ is found to be more clinically effective when used in conjugation with A.A. than attendance in A.A. or Psychotherapy alone (Sachs, 2003).

Maryhaven experience is an example of such a combination. Maryhaven, a comprehensive, community based drug abuse treatment facility combines a core commitment to 12-step principles and practices
with the use of scientifically derived treatment interventions. The programme uses empirically derived treatment tools to further 12-step objectives. According to this approach there are natural affinities between 12-step and some empirical treatment tools such as the stages of change model (Brigham, 2003).

3.4.3. Twelve-Step Association and Dually Diagnosed Patients

A study by Kelly, Mc Kellar and Moos (2003) examined the influence of Co morbid Major Depressive Disorder among patients with Substance Use Disorders on 12-step self-help group involvement and its relation to treatment outcome. 2161 male patients were included in the study. Among them 110 had a co-morbid Major Depressive Disorder diagnosis and 2051 were without psychiatric co morbidity (Substance Use Disorders only). Finding of the study was that Substance Use Disorder Major Depressive Disorder patients were initially less socially involved in and derived progressively less benefit from 12-step groups overtime compared to the Substance Use Disorder only group.

Indication is that Substance Use Disorder Major Depressive Disorder patients may not assimilate as readily into, nor benefit as much from, traditional 12-step, self-help groups as psychiatrically non-co- morbid patients.

Humphreys (2003) also notes that research has indicated that participation in A.A. or other 12-step programmes resulted in reductions in substance abuse and psychiatric problems, reducing health care costs overtime.
Dually diagnosed patients, namely patients having substance use disorder and psychiatric disorder can also benefit from association with 12-step fellowship. A comparative study by Laudet, Maguras, Cleland, Vogel and others (2004) investigated the effect of such 12-step based groups on abstinence among dually diagnosed persons. Generalized Estimation Equation Analysis indicated that over the two years’ study period, ongoing Double Trouble in Recovery attendance was significantly associated with a greater likelihood of abstinence after controlling for other pertinent variables.

3.4.4. Effectiveness of Pretreatment A.A. Affiliation

There are lots of studies on the effectiveness of post treatment A.A. affiliation. It is Keith Humphreys and team who investigated on the question whether patients’ prior involvement is a prognostic marker in the treatment of alcoholic patients. There are a number of studies, which show that the prevalence of pretreatment A.A. affiliation is increasing.

Studies of patients seeking alcohol treatment reported A.A. involvement rates of 28 percent in 1981 (Finney & Moos, 1981); 55 percent in 1986 (Lawrence et al., 1986); 69 percent in 1988; and 78 percent in 1996 (Tonigan et al., 1996).

From 1979 to 1990, A.A. was the most common source of help sought for alcohol problems and its use increased more than any other source over this period. A Meta-analysis conducted by Emrick and others (1993) indicated that prior A.A. involvement correlated modestly
with better treatment drinking outcome. It was also found that prior A.A. involvement predicts the type of outcome, with A.A. members being more likely to abstain from alcohol than to become moderate drinkers after treatment (Finney & Moos, 1981; Lawrence et al., 1986).

Attendance in A.A. prior to, during and after inpatient treatment is related to positive outcome. Gossop, Harris and others (2003) conducted a study to investigate the relationship between attendance at Alcoholics Anonymous meetings prior to, during and after leaving treatment and changes in clinical outcome following inpatient alcohol treatment. The sample was 150 patients in an inpatient alcohol treatment program who met I.C.D.-10 criteria for alcohol dependence. The design of the study was longitudinal design. The full sample was interviewed at admission (within 5 days of entry) and 6 months after departure from treatment. 80 percent (120 patients) were re-interviewed.

Significant improvement in drinking behaviours (frequency, quantity and reported problems), psychological problems and quality of life were reported. Frequent attendees of A.A had superior drinking outcomes to non-attendees and infrequent attendees. Those who attended A.A. on a weekly or more frequent basis after treatment reported greater reductions in alcohol consumption and more abstinent days.

3.4.5. Help Seeking and Help Giving

An important component of self-help group participation is help seeking. Tucker, Vuchinich and Rippens (2004), investigated the
variables associated with help-seeking for drinking problems and with long term drinking outcomes. In the study among 167 subjects with drinking practices and problems, influences on help-seeking, life-seeking and life events were assessed retrospectively using structured interviews. Results indicated that different dimensions of drinking problems were associated with help seeking and drinking outcomes. Stable resolution was associated with heavier drinking and greater negative life events before resolution. Seeking help from treatment was associated with greater psychosocial problems and higher dependence on alcohol. The study also suggested ways to increase help-seeking.

The influences on seeking help from professional alcohol treatment and from Alcoholics Anonymous were investigated by the same researchers using factor analysis (Tucker, Vuchinich & Rippens, 2004). 167 problem drinkers with different help-seeking experiences and current drinking statuses were used for the study. The rating of barriers to, or reasons for seeking help from treatment and A.A. by the subjects were subjected to factor analysis. Privacy concerns and participants’ beliefs that they could solve their problems on their own were found to be the main impediments to help-seeking. Social and other functional problems related to drinking were the common reasons for help-seeking. There was unique influence to treatment and to A.A. An important finding was that help-seeking factors did not vary by drinking status.

Regarding the role of self-help group in reduction of alcohol problems there is a principle called ‘helper therapy’ principle, which suggests that within mutual help groups those who help others help themselves. Zemore, Kaskutas and Ammon (2004) have conducted a
study to examine whether clients in treatment for alcohol and drug problems benefit from helping others, and how helping relates to 12-step involvement. In this longitudinal study an ethnically diverse community sample of 279 alcohol and / or drug dependent individuals (162 males, 117 females) were recruited through advertisement and treatment referral from Northern California Bay Area Communities. Participants were treated at one of four day-treatment programs. A helping checklist measured the amount of time participants spent during treatment helping others by sharing experiences. Explaining how to get help and giving advice on housing and employment measures of 12-step involvement and substance use outcomes were administered at baseline and a 56-month follow up.

An important finding was that helping and 12-step involvement emerged as important and related predictors of treatment outcomes. In general sample, total abstinence at follow-up was strongly and positively predicted by 12-step involvement at follow up. Helping positively predicted subsequent 12-step involvement. Among individuals drinking during follow-up, helping during treatment predicted a lower probability to binge drinking. In short, the findings support the helper therapy principle.

3.5. SPIRITUALITY AND ABSTINENCE IN ALCOHOLIC PATIENTS

A fresh interest regarding relationship of the physical, mental, emotional, social and spiritual facets of our lives is evolving and penetrating many disciplines. There is a growing acknowledgement of
the roles of religion and spirituality in the well-being-construct. Health outcomes cannot be attributed solely to conventional organic medicine. Spirituality and religion can be employed in the prevention of alcohol abuse and in treatment for fostering maintenance of long-term recovery.

3.5.1. The Concept of Spirituality

The word ‘spiritual’ comes from the root “spiritus” meaning breath or life. Miller likens spiritual variables to other etiological dimensions such as physiological, genetic, physiological, family and socio-cultural influences. The concept of spirituality is often defined in contrast with materialism. Spiritual is that which is transcendent or transpersonal (Miller, 2001).

Spirituality is related to a person’s attitude about life’s meaning and purpose. Essentially, spirituality involves attitudes that are based about our relationship with our self with other human beings, with our world (including our physical and social environments), with life (as to its meaning and purpose) and ultimately, with God, a Higher power, “or Universal Consciousness” (Whitefield, 1985).

A descriptive study of 265 published books and papers on spirituality and addiction was conducted by Cook (2004) to classify how the concept of spirituality is understood and employed in practice by clinicians and researchers. The study revealed a diversity and lack of clarity of understanding of the concept of spirituality. 13 conceptual components of spirituality which recurred within the literature were identified. Among these, ‘relatedness’ and ‘transcendence’ were found
most frequently. Other components identified, though less frequently encountered, were meaning/purpose, whiteness, religiousness and consciousness. Researcher has noted a bias. For e.g. the majority of publications are from North America and the field is dominated by interest in 12-steps and Christian spirituality.

3.5.2. Spirituality and Religion

The word ‘religion’ comes from the root ‘religio’ which means humanity’s bond with a Greater Being. The meaning of the word religion had evolved to include religious behaviours and rituals.

Spirituality is at the level of the individual while religion is a social phenomenon. Spirituality can exist outside religion and religion may contain a range of spiritual methods. Spirituality does not require a belief in a God but belief alone does not constitute spirituality. What is necessary for those beliefs to lead to values through personal verification, for one’s philosophy of life is to be “vitalized by emotion” (Sapir, 1949).

Organized religion generally depends on the group of people reaching agreement on our beliefs about God, divine revelation, doctrine, and mortality. The doctrines are objective, i.e. impersonal. Having an important personal spiritual experience that validates or intensifies the religious beliefs is ideal but not necessary.

On the other hand, spirituality is highly personal or subjective. Some people may practice a certain religion but have personal spiritual
beliefs that are at odds with some of the religious doctrines (Bernas, 1993).

Because of its focus on the transcendent, spirituality defies customary conceptual boundaries, whereas religion involves beliefs, practices, forms of governance and rituals and therefore easier to define and measure in operational terms. Miller suggests that the measurement of spirituality should be multi-dimensional, involving behaviour, belief and experiences.

Religion involves a system of worship and doctrine that is shared with in its groupings. Spirituality promotes compassion toward others. Religion works to foster spiritual life. Spirituality is a relevant aspect of religious participation. There are different domains of spirituality and religion like values, beliefs, forgiveness, coping, commitment and daily spiritual experience which are relevant in health outcomes (Turner, 2000).

3.5.3. Health Benefits of Spirituality

The most consistent predictors of quality of life and possible survival among patients with advanced malignancies were a social support system and spirituality or religion. Numerous studies have found association between religious commitment and lower blood pressure (Bezilla, 1993).

A poll of 1000 U.S. adults conducted in 1996 revealed that 79 percent believed that religious faith can help in recovery from serious
illness, and 63 percent agreed that doctors should talk to patients about spiritual issues (Mc Nichol, 1996).

Sometimes culture provides specific rituals and ceremonies that offer support to people as they attempt to cope with stressful situations. Religious rituals that help the bereaved through their ordeals, confession and atonement in certain religions etc. are cited as examples (Carson & Butcher, 1998).

Spirituality promotes a value that people see in themselves and others. Such an outlook is crucial as a coping mechanism and motivating positive behaviour.

3.5.4. Addition, More than a ‘Brain Disease’

Jerorne D. Frank and Julia Frank (1993) in the classical book: ‘Persuasion and Healing’, assert that the disease concept of alcoholism as a therapy is doomed to fail since it is based on the view that addiction is a brain disease. It absolves the patient of the responsibility. According to them A.A. approach makes the patient responsible for the consequences of his drinking and for following the steps to recovery, which involves moral acts, there by relieving the feelings of guilt.

Christopher D. Ringwald (2003) sees alcoholism in two levels. One is professional level where addiction is seen as a disease where cause is genetic and neuro-chemical and hope lies in prescription. The other is personal ground level in which recovery of most clients involves a personal transformation, which is spiritual in nature.
3.5.5. Lack of Spirituality and Alcohol Indulgence

If an individual’s beliefs about self, others and the Absolute are formed in circumstances of unconditional love, acceptance and trust in all of his relationships, he is said to have ‘positive spirituality. Positive spirituality reflects a sense of connectedness with others and with a benevolent power greater than self, anchored in the belief that life has meaning and purpose.

When positive spirituality dominates our lives, we have no need to alter our moods with addictive substances or behaviours. The opposite is true for active alcoholics and sober but non-recovering alcoholics. They see the world as unsafe. Life for them is devoid of positive purpose. For the alcoholic, alcohol becomes the method of coping with stress and fails to complete the development of personality (Prezioso, 1987).

Terrence T. Gorski (2001) sees a relationship between spirituality and relapse. Spiritual characteristics of human beings include ability to perceive, think, feel, act, and assign meaning and purpose to life. Individual consciousness creates a core personal identity that moves beyond physical existence into a complex world of ideas and images. This personal consciousness drives people to find meaning and purpose in human existence.

The desire for a sense of meaning that transcends the physical has led many recovering people to search for the laws or organizing principles of the non-physical dimension of human existence. They
believe that human life in ruled by laws-physical world by physical laws and spiritual world by spiritual laws. People who live in accordance with these universal laws find meaning in life, meaning and purpose in their sobriety. Those who violate these, experience inner pain, turmoil and frustration. They become disillusioned in recovery and many relapse to chemical use to medicate the pain (Gorski, 2001).

3.5.6. Alcoholism and Religious Beliefs

Harford (1987) in his study “Psychosocial Factors in Adolescent Drinking Contexts” found that positive function of drinking, personal attitudes and values and environmental contexts were associated with drinking contexts. According to Zucker (1987) more religious patients had a more anti-alcoholic attitude. Associations between patient’s religiosity, alcoholic’s attitude and knowledge in alcoholic treatment programme was found in his studies. It was also found that the least religious patients were more likely to change their attitude towards alcohol and to increase their knowledge of the deleterious effects of alcohol after four weeks of treatment on an inpatient rehabilitation unit.

There is also a study which notes that religious beliefs and cultural practices contribute to substance abuse. The study by Ray, Patnaik, Mohan and Kumar (1992) involved a sample of 195 (17-58 years) attending a de-addiction treatment centre at Bubaneswar. The finding is that religious beliefs and the cultural practices of consuming cannabis, opium, contributed to the initiation of substance abuse in some individuals though they may not be the only maintaining factors.
Tonigan and others (2002) conducted a study on the importance of clients’ God belief for A.A. affiliation and recovery. The investigation was conducted in 952 outpatients of Project Match and 774 aftercare patients. Assessments were conducted using the Form 90, Religious Behaviours and Background, and Alcoholics Anonymous Inventory. It was found that 12-step association was significantly related to abstinence in atheist and agnostic clients as well as clients self-labeled as spiritual and theistic. No significant difference was found in drinking intensity in theistic and atheistic clients.

In the study by Kaskutas, Turk and Weisner (2003) examining the role of religiosity in A.A. involvement and long term sobriety in a representative sample of 587 men and women (aged 30-44 years) were interviewed upon entering treatment and re-interviewed and 3 years later. Similar proportions within each religiosity group reported prior 12 month A.A. exposure at base line and over 40 percent of the unsure, spiritual and religious respondents and 25 percent of the secular respondents reported having gone to at least one A.A. meeting in the 12 months before the year 3 interviews. Those who reported a spiritual awakening at year 3 were at the highest odds of continuous sobriety for the last year. Religious self-definition was not associated with significantly higher odds of sobriety at years 3 after controlling for other influences. An increase in A.A. activities other than A.A. meetings between baseline and the year following was also associated with a higher odds of sobriety. This highlights the importance of increased involvement in the period immediately following treatment.
3.5.7. Alcoholics Recovery Through Spiritual Transformation

A.A. conceptualizes alcoholism as a spiritual and moral problem. Alcoholism is rooted in self-centeredness and grandiosity as evidenced by behaviours like refusing to admit shortcomings (i.e., inability to control alcohol consumption), and ignoring the needs and feelings of other people.

To help the members in their journey to sobriety, A.A. offers a fellowship and a twelve step programme of abstinence from alcohol, acceptance of being alcoholic, honest self examination, atonement for post wrong doings, spiritual reflection, and service to fellow alcoholics more than being a form of alcoholism rehabilitation. A.A. is primarily a programme of spiritual growth. Of the 12 steps, seven deal with spiritual transformation (Emrick, Tonigan et al., 1993). In other words it is a spiritual basic community and way of living (Antze, 1987).

3.5.8. Spirituality and Recovery of Alcoholics

It is important to consider how spirituality works for addicts. The alcoholic in need is encouraged to try what has worked for others and see if it helps him also. People have a tendency to adhere to a set of beliefs and practices that work for them. Spiritual methods are related to cognitive behavioural therapy, which promotes thoughts and ideas that work. According to the French sociologist Emile Durkeim, the true function of religion or spirituality is to make people act and help to live (Durkeim, 1912).
A large number of programmes offer alternative spiritualities, often blending Christian and Islamic values with the 12-step approach. Yoga is an effective alternate therapy for better living based on Hindu scriptures. According to Emrick (1993) there is only a limited evidence for a predictive relationship of spirituality to recovery. A.A. attendance is often found to be modestly predictive of better treatment outcomes.

Twelve-step spirituality does not require members to adhere to a specific set of teachings about the nature of God or living a spiritual life. It nurtures and validates personal spiritual experience in the light of the addiction and the individual’s vital need for recovery. They do not debate theology; but try to find a spiritual path that is sufficient to keep them clean and sober (Bernas, 1993).

He explains recovery spiritually as different from the conventional spirituality. Recovery spirituality is about sobriety, not piety or moral correctness or “holiness”. It is a “manner of living”, not just a way of thinking, praying or talking. While prayer and meditation are important parts of the 12-step spiritual recovery, spirituality here is primarily a programme of action. It is more horizontal than vertical. So one needs to be more in tune with what others reflect back to him as being the reality of his addiction. In doing so he should allow a sponsor, counselor or friend in recovery having real power in helping other people to be used as instruments by whatever High Power he believes in (Bernas, 1993).

The relationship between spirituality and recovery from alcoholism was examined by Chic (1993). Steps 11 and 12 were studied
using a Step Questionnaire among 100 Alcoholic Anonymous Members. It was postulated that the extent to which steps 11 and 12 are practiced would be positively related to the extent of purpose in life as reported by the subjects. The major finding of the study is that significant relationship existed between the practice of the steps 11 and 12 and purpose in life scores, between practice of these steps and the length of sobriety and between the attendance in A.A. and purpose in life scores.

Another research has found that even though spirituality improves outcomes, most patients say it was neglected during their stay in treatment (Royce, 1995). A review of research by 20 scientists and directed by Miller in 1996 for the private National institute for Health Care Research, found good evidence that involvement with A.A. is associated with better outcomes in outpatient care and that meditation-based interventions are associated with better outcomes after inpatient care.

Research has found less alcohol abuse among people who see themselves as religious than among less religious people. Many addicts who succumb to alcoholism are found to have a low level of religious involvement. Spiritual or religious involvement acts as an important protective factor against alcohol abuse. Spiritual engagement is heavily correlated with recovery. Miller found that subjects who practiced the 12-steps were more likely to remain abstinent than those treated with other types of non-spiritual therapy (Miller, 1998).

Another review sponsored by the National Institute on Alcoholism and Alcohol Abuse at the Fetzer Institute found “strong
support” for the protective nature of spirituality and religion (110 studies), of A.A. involvement (51 studies), and of spiritual religious interventions (26 studies) (National Institute of Alcohol Abuse and Alcoholism [N.I.A.A.A.], 1999).

In a three-year study of 722 subjects, Lee A. Kaskutas of the Alcohol Research Group found that both secular and religious participants in A.A., at follow up, reported a doubled rate of spiritual awakening (Kaskutas, 1999).

According to Sandoz (1999) the present treatment programmes for alcoholism rest on a spiritual basis. It is estimated that most of the 11,000 treatment programmes in U.S. introduce their clients to some form of spirituality, usually based on the 12-step programme of Alcoholics Anonymous or Narcotics Anonymous (Roman & Blun, 1997).

Alcoholics Anonymous is a world-wide organization, which advocates a spiritual approach in recovery. Though it doesn’t advocate any specific religious influence, its basic premise has Christian sense in the use of the word, God. A.A. bases the role of spirituality as a mechanism for change. A.A. fosters a healthy dependence in the alcoholic. In religious and spiritual practices, a person offers oneself in simple belief and trust. Through the A.A. the addict develops spirituality by looking inward in order to recognize his breadth and potential with the practice of the 11th and 12th steps of A.A.-the two spiritual tenets-a sense of life purpose (Turner, 2000).
The Delaware Valley Clinical Trials Network surveyed staff at 50 programmes in three states and found that 83 percent agreed with the statement: “spirituality should be emphasized more“(Northeastern States Addiction Technology Transfer Centre [N.S.A.T.T.C.].Bulletin, 2000).

There is reluctance among administrators of treatment programmes to admit the role of spirituality. But the case of the clients and counselors is different. Christopher D. Ringwald observes that administrators often describe their regimens as entirely medical and psychological even when a copy of the 12-steps hangs on the wall or patients meet daily for morning meditation. But clients and counselors begged to differ (Ringwald, 2003).

Fiazzo and others (2003) have conducted a two-phase study on the attitude of medical students toward spiritual approach of Alcoholics Anonymous. In the first phase the views of addiction faculty to third-year medical students on the importance of spirituality in alcoholism treatment was assessed. A questionnaire to assess attitudes toward spiritual, biological, and psychological approaches to addiction treatment was administered. The faculty viewed spirituality as relatively more important in addiction treatment than did the students. In the second phase it was assessed whether medical students’ attitude toward spirituality changed over the course of a psychiatry clerkship. It was found that at the beginning of the clerkship, students rated a spiritually based approach as important in addiction treatment while at the end of the clerkship; they rated the biological approach as more important.
Zemore S.E. and Kaskutas L.A. have made a study to investigate the influence of helping activities and spirituality on sobriety. Questionnaires were administered to recovering alcoholics (118 men and 80 women) recruited at A.A. and Women for Sobriety meetings, treatment programs and through personal connections. A helping scale measured Recovery Helping (8-item alpha=0.78), Life Helping (12-item Alpha=0.62), and Community Helping (6-item alpha=0.60). The Daily Spiritual Experiences Scale assessed two components of spirituality identified by factor analysis. Theism and Self-Transcendence, two components of an A.A. Scale, Involvement and Achievement, were also treated separately on the basis of factor analysis.

An important result of the study was that longer sobriety predicted significantly more time spent on recovery, helping and higher levels of Theism, Self-Transcendence and A.A. achievement. The result also suggested the roles for A.A. and spirituality in encouraging helping, and they indicated that some forms of spirituality relates to A.A. affiliation (Zemore & Kaskutas, 2004).

In a study by Poage, Ketzenberger and Olson (2004), in the sample of recovering alcoholics attending Alcoholics Anonymous meetings, it was found that length of sobriety was significantly associated with spirituality. Spirituality and contentment were also positively related. Another finding of the study was the gender differences in the relationships among spirituality, contentment, and stress level. Spirituality was correlated with lower stress for women but not for men. Men’s commitment was related to lower stress levels, but contentment, and stress was non-significant for women.