CHAPTER II

REVIEW OF LITERATURE
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The literature relating to workplace alcoholism and the problems there-of is abundant and replete with varied approaches to the issue and the various dimensions and manifestations of the problem. Ranging from general predictions and patterns of alcohol abuse among the workforce to specific issues like etiology, manifestation and consequences of alcoholism, responses of the corporates and employee assistance programmes, legal dimensions of the issue etc., the problem has been analysed from varied perspectives, and varied points of view have been expressed. The research question is one that has caught the attention of researchers and professionals from as varied disciplines as psychology, sociology, social work, economics, business administration, Law, Medicine, and even philosophy. The literature reviewed here, is, for the purpose of coherent and clear presentation, divided and categorised into four broad subdivisions which are as follows:

I. Prevalence trends, drinking patterns and socio-cultural dimensions of alcoholism.
II. Etiological factors contributing to workplace alcoholism.
III. Consequences and manifestations of workplace alcoholism.
IV. Responses of corporates, policies and strategies, legal issues, etc-including Employee assistance programmes.

1. PREVALENCE TRENDS, DRINKING PATTERNS AND SOCIO-CULTURAL DIMENSIONS OF ALCOHOLISM:

This section focuses on epidemiology, prevalence rates, type and pattern of alcohol abuse, racial, ethnic, economic, occupational, socio-demographic, class, age and work-related differences and distribution of alcohol abusers etc., are presented. Acknowledging the fact that alcohol dependence is a disease, studies have focussed on various issue relating to epidemiology.
A study by Aertgeerts et al (2000) attempted to (1) determine the prevalence of alcohol problems in college freshmen, (2) assess the performance of both the CAGE and the Alcohol Use Disorders Identification Test (AUDIT) Questionnaires in this population, and (3) assess the possibility of improving the CAGE and/or AUDIT. A sample of 3564 college freshmen at the Catholic University of Leuven (Belgium) completed a questionnaire assessing drinking behavior and identifying students at risk as defined by DSM-IV criteria. The questionnaire also included the CAGE questionnaire and the AUDIT. The area under the receiver operating characteristic curve of the CAGE and the AUDIT was 0.76 and 0.85, respectively. The cutoff score of 1 for the CAGE was associated with a sensitivity of 42 percent, a specificity of 87 percent, a positive predictive value of 37 percent, and a negative predictive value of 77 percent. These results were related with a prevalence of 14.1 percent of alcohol problems. Replacing one question of the CAGE by "often drinking under the influence" resulted in the CUGE (acronym for "cut down, under influence, guilty feelings, and eye opener") with an area under the curve of 0.96, a positive likelihood ratio of 8.7, and a negative likelihood ratio of 0.04. It is concluded that prevalence of alcohol problems in college students is high.

Findings from a survey of the pattern of drinking in Bulgaria and its relationship with sociodemographic factors are presented by Balabanova (2000). A multivariate analysis of data on patterns of alcohol consumption from a multi-stage nationwide survey in 1997 of 1,550 Bulgarian adults found that 50.7 percent of men out of which 75% are of the workable age-group. It was found that in this group 65% were industrial workers working in urban and semi-urban corporate establishments and 13.6 percent of women drink at least weekly. Drinking prevalence is lowest among the elderly of both the sexes and those living in villages. The authors recommend a coordinated, effective policy response. Some of the legal prerequisites are in place, but they are poorly enforced and no overall strategy to address this issue exists.
Bonder et al (1987) investigated the personal, family and social data of 82 outpatients aged (41-60 years) of the Pavia Health Consortium in 1977-1979. Most samples were married, had attended or completed elementary school, samples were mainly industrial workers (46.4%), nearly all unskilled, followed by housewives and unemployed men. Only 14.4% visited the service more than 5 times. Alcoholics formed a relatively distinguishable group in the population. Determining factors included unsatisfactory and easily available, socially encouraged means of escaping frustration. The small number of repeated visits emphasizes the weakness of follow-up treatment in a territorial structure.

Prevalence rates may be relevant for past alcohol abusers as well as workers presently having alcohol-related problems. [1] Berry and Boland (1977) point out "...that the present and past economic behavior of problem drinkers is significantly different from that of non-problem drinkers" (p. 37). For example, absences per annum were significantly higher for all classifications of alcoholism (known, suspected and recovered). This suggests long-term problems with productivity losses even in the recovery stage, or that alcoholics are problem workers even without alcohol. According to Berry and Boland, an alcohol prevalence rate of about 4% of the workforce is generally accepted, although Pell and D'Alonzo (1973) reported a rate of about 1% in a comprehensive single company study and Cahalan, et al., (1972) approximated a 2% prevalence rate.

This paper by Cherpital et al (1999) explores the effect of regional ("wet" versus "dry") variation in drinking patterns and problems on the prevalence of alcohol-related problems among those seeking care in primary care settings. A sample of black primary care patients interviewed in Hinds County, MS (n = 740) and in Contra Costa County, CA (n = 93) are compared on quantity and frequency of usual drinking, drunkenness, consequences of
drinking, and alcohol dependence. Controlling for demographic differences in logistic regression analysis, drinkers in Contra Costa, while no more likely to report heavy drinking, were four times more likely to report alcohol-related consequences, more than five times more likely to report alcohol dependence experiences, and more than nine and a half times more likely to report ever having had treatment for an alcohol problem than those in Hinds County.

A study by Deshpande (1999) examined the prevalence of tobacco, alcohol and illicit drug use in adolescents of different socioeconomic strata from a district in Sikkim, as well as the relationship between the socioeconomic variables and the perception of consumption by peers. Interviews were conducted with 866 adolescents (438 males and 428 females) ranging in age from 15 to 19 years. Socio-demographic variables studied included: socioeconomic strata, age, gender, educational level achieved, occupation, and religious affiliation. Of adolescents interviewed, 35.7 percent had consumed alcohol, 25.8 percent tobacco, and 2.3 percent illicit drugs. Higher percentages of consumption were found among those with less education and among those who worked as plantation labourers.

Fillmore (1989) suggests that the prevalence estimates (and perceived costs) of alcoholism in the workplace coming from the contemporary scientific community were used by policy makers to "...invade the workplace with alcoholism programmes". Historically alcohol problems were predominantly seen to be endemic to the working class, the undeserving poor or industrial workers, rather than society as a whole. Early temperance scholars found ANOVA representation of workplace problems in occupations where alcohol was related to the nature of the work. Prevalence estimates were necessary to reinforce two important concepts: "...alcoholics were in fact in the world of business and industry and were costing these institutions money". The goal of promotion of occupational alcoholism programmes meant that businesses had to
be convinced there was a problem. As early as 1942 it was estimated "...about 80% of male inebriates were employed..." [Jellinek (1947)cited by Fillmore although this was unsupported by data sources. A1951 study indicated 63% of male alcoholism patients held a job when entering treatment and 56% had held a steady job for three years [Straus (1949) and Bacon (1947) cited by Fillmore (p. 49)]. In 1943, Jellinek estimated "...these men lost on the average 22 days per year because of acute intoxication..." and had a fatal accident rate of more than twice that of non-alcoholics.

Fred (1993) in a study on substance abuse at the workplace with special reference to pharmacists claims that the incidence of alcohol or other drugs among health care professionals including pharmacists is the same or slightly above the average for the general population, their exposure to the habit forming drugs or alcohol to other professionals in other occupations. The author suggests that instead of summarily firing a pharmacist with a drug problem, supervisors should employ a comprehensive programme that includes education and treatment, as it is an expensive issue to ignore and a simple dismissal does a disservice to both the individual and the employer.

Harvey et al (1992)'s cross-sectional and longitudinal study focuses on the patterns of alcohol consumption in white collar workers. The study was conducted as a follow-up to an earlier study by Jenkins on alcohol-consumption patterns of Govt. workers. 75 samples who participated in the original study (51 male and 24 females) were interviewed for the follow-up. Approximately 66% of the samples had maintained or increased their drinking levels in the 6 years since the earlier study. Greater reductions in consumption were found among men and especially industrial workers. Findings suggest a need for an additional focus in health education campaigns on workers without a university at the shop floor level.
A study was conducted to explore the perception and prevailing attitudes of small business owners towards substance abuse in the workplace. The perceptions of 165 businesses in a southeastern metropolitan area in Atlanta were studied regarding the nature of substance abuse problems. In addition, some of the strategies small business owners adopted to deal with problems were identified. While the owners identified, substance abuse as very extremely serious in local businesses, industries and the U.S. as a whole, they perceived that they had less of a problem in their own firms. The managers felt ill-equipped to recognize and deal with substance abuse problems and were seeking inexpensive education and training help from public and industry sources- Harry and Grasnof(1993).

A report by Hoffman et al ( 1997) uses information from the National Household Survey on Drug Abuse (NHSDA) to examine a number of issues involving illicit drug and heavy alcohol use among U.S. workers and workplace policies that address drug and alcohol use. It presents data derived from 7,055 NHSDA respondents (age 18-49) representing over 78 million full-time workers in the United States. The principal findings from analysis of this data is presented. In the overall population, about 8 percent of full-time workers, 9 percent of part-time workers, and 16 percent of the unemployed reported current illicit alcohol use. The percentage of full-time workers who reported illicit drug use remained between seven and eight percent from 1991 to 1994. The percentage of full-time workers who reported heavy alcohol use remained between ten and twelve percent from 1988 to 1994. Those reporting illicit drug use were more likely than those reporting no current illicit drug use to state that they had worked for three or more employers in the past year, taken an unexcused work absence in the past month, voluntarily left an employer in the past year, and been fired by an employer in the past year. The rate of current illicit drug use was higher among 18-25 year olds, males, whites, and those who reported annual personal incomes of less than $9,000 or $75,000 or more than
among older workers, women, blacks and Hispanics, or those with income between 49,000 and 474,999. Thirty-five percent reported that their workplace tested for drug use at hiring, 20 percent reported random drug testing programmes, 28 percent reported drug testing programmes based upon reasonable suspicion of a supervisor, and 23 percent reported drug testing following work-related accidents.

According to the data from the World Health Organization (WHO), Russia takes first place in the world in annual pure alcohol consumption level, which was 14.5 litres per person in 1996. The objective of the present research was to study the drinking patterns of different professional groups in the urban population in the European northern part of Russia. These groups consisted of employees of big industries, the staff of Aeroflot Airline company, public transport drivers, railroad workers, and others. (Kallinin and Siderov 1999).

A study by Kebede (1999) describes the prevalence of alcohol dependence and problem drinking in a representative sample (n = 10,203) of adults in Addis Ababa. Alcohol dependence was included as a dependent variable; independent variables included sex, age, ethnicity, education, and employment. Of the sample 45.1 percent were male, 44.9 percent were adolescents. Most (88 percent) had some form of formal education, only 35 percent were employed. Of the total population, 2.7 percent responded positively to at least 2 of the 4 CAGE items, fulfilling the definition of problem drinking. The prevalence of problem drinking increased with increasing age. The trend was statistically significant (P for trend = 0.03). On the other hand, there was a statistically significant negative trend in the association with educational level, use decreasing with increasing educational attainment (P for trend = 0.0006). There was also a statistically significant 39 percent increased risk of alcohol use with employment.
This paper by Larsen (1994) reports data from two surveys concerning alcohol use in different segments of the service industry. In the first study 84 students at three different colleges in the Stavanger region were interviewed concerning their alcohol habits using the audit test. The second survey concentrated on service employees in the Rogoland area. One hundred and fifty respondents answered the AUDIT scale. The results showed that hotel and restaurant affiliated individuals scored significantly higher on the AUDIT than the other respondents. The first survey indicated that students at the Norwegian college of hotel management obtained significantly higher AUDIT scores than other groups of students and that restaurant workers scored significantly higher than employees in other branches of the service industry. The author offers varied interpretations to the findings of their study i) the findings are consistent with the hypothesis indicating more alcohol use by hotel and restaurant affiliated individuals than by other individuals in the service industry, the higher availability of alcohol in restaurant settings may be the one most important factor in explaining the fact that restaurant and catering personnel obtained higher scores on the direct measures of alcohol use in the study ii) An alternative interpretation might be that the hospitality industry attracts people who have a higher consumption level even before they enter their professional career. This phenomenon of self-selection could be an important factor in understanding the results of the present research iii) The third interpretation of these findings is that working conditions in themselves are such in a restaurant and hotel that they promote problem drinking or a high consumption level. Factors such as unstable working hours, work-related stress. Low emotional support within the working environment and even alienation may be important explanatory factors.

Leif et al (1989) studied the annual incidence of alcoholism among 2,550 males in a community cohort during the period 1968-1988. The highest rates were found for industrial workers (34/100,000): followed by self-employed businessmen, artisans, and farmers (230/100.00) combined: and white-collar
employees (190/100,000). Findings support the contentions that class creates alcoholics at different rates through their general class situations and that alcoholism is not equally distributed throughout society.

Martinez et al (1986) studied the prevalence of alcohol use in the industrial setting. Blood samples were taken from 200 samples and a questionnaire was administered to determine sample’s alcohol consumption and medical history. Results show the following: 15% of the samples had liver damage; 225 drank between 80 to 150 cc of alcohol / day and were labeled excessive drinkers; 7% consumed more than 150 cc of pure alcohol / day and were labeled suspected alcoholics: and 6% acknowledged previous medical treatments, mainly on an out-patient basis, for problems associated with alcohol use.

In a paper presented at the International Symposium of Research on work related Diseases Martti (1987) reviews research on the relationship of alcoholism to occupation with special focus on health and related aspects. Studies indicate that the alcohol-use of health services among males is the highest among unskilled workers, painters and seamen, and construction workers and the lowest among executives and farmers. Many population studies have shown that blue-collar workers and labourers have the highest level of alcohol consumption. The risk factors associated with occupation include the availability of alcohol at work. Social pressure to drink on the job, separation from normal social relationships, and freedom from supervision. The opportunity to obtain alcoholic beverages relatively inexpensively, when combined with social pressure by peers to drink heavily, is an especially powerful explanation for high rates of alcoholism within an occupation.

A study by McKee et al (1999) analyzed levels and distribution of alcohol consumption in a national sample of the Russian population. A cross-section, multi-stage random survey of men and women (N = 1599, response rate 66 percent) gathered data through interviews on drinking alcohol frequency and the
average amount consumed at one occasion. Information was collected on
smoking, self-rated health, socioeconomic factors and political attitudes. Nine
percent of men and 35 percent of women reported that they never drink alcohol;
10 percent of men and 2 percent women drink several times a week; 44 percent
of men and 6 percent of women reported that they drink an equivalent of 25 ml
or more at one occasion of vodka and 31 percent of men and 3 percent of women
would do so at least once a month (25 ml of vodka contains 78.5 g of absolute
alcohol). There were differences in alcohol consumption between geographical
areas. Material deprivation was unrelated to alcohol consumption. Among men,
smokers, unmarried, unemployed and men reporting poor health consumed more
alcohol; However, among the working population alcohol consumption was
relatively higher among the industrial workers.

Morse (1988) in an article on work re-entry propounds that the recovering
client's system of personal and social support after treatment is often inadequate
in the workplace. Work reentry contracting involves the recovering person
(or client), one or more treatment center counselors, and one or more significant
people from the employing entity. In stage 1, "increasing staff's industrial
awareness," one or more staff members become familiar with the workplace
realities the client faces. Convincing the client of the worth of reentry
contracting is stage 2; it should be presented as an option, never forced. Stage
3 is the contracting meeting to set up contact between treatment staff and the
employee assistance programme (EAP) counselor or employer. Possible contract
responsibilities of the client, the employer, and the treatment center are listed.
Possible payoffs of work reentry contracting for treatment centers are outlined.

Use of alcohol in the workplace, alcohol assistance programmes, the
identification of managers as an at risk group, factors in the manager's work
environment, the importance of the social context on alcohol use, and alcohol
use in business were studied. Parker et al(1995). The roles of alcohol in 60
businesses were investigated. Managers were interviewed regarding the use of alcohol in the business and the company policy towards alcohol. Managers recorded their own alcohol consumption for both business and personal activities for two weeks. Alcohol was used in all 60 businesses. A quarter of the businesses had a written policy regulating the use of alcohol, although two-thirds of managers felt that there was a common understanding in the company of how alcohol should be used. More than three-quarters of the managers had encountered problem drinkers and the major source of this contact was through the workplace.

A report by Packer et al (1999) presents results from the 1998 National Household Survey on Drug Abuse, based on a representative sample of 25,500 United States citizens age 12 years or older. In 1998, 113 million Americans age 12 and older reported current use of alcohol, using alcohol at least once during the 30 days prior to the interview. About 33 million of this group engaged in binge drinking, drinking 5 or more drinks on one occasion. Twelve million were heavy drinkers, having five or more drinks on one occasion on 5 or more days during the past 30 days. The percentages falling into these different groups have not changed since 1988. Although alcoholic beverages consumption is illegal for those under 21 years of age, 10.5 million current drinkers were age 12-20 in 1998. Of this group, 5.1 million engaged in binge drinking, including 2.3 million, who also were heavy drinkers. There have been no statistically significant changes in the rates of underage drinking since 1994. In 1998, daily use of alcohol (four or five drinks) was associated with great risk by 76 percent of the population, in increase of 6 percent in perceived risk in 1993. However, the perceived risk of having five or more drinks once or twice a week decreased over the same period from 60 percent in 1993 to 54 percent in 1998. An estimated 9.7 million people were dependent on alcohol, including 915,000 youths aged 12-17. An estimated 1.7 million reported receiving treatment or counselling for alcohol use.
Self-reported drinking habits were studied in the Seychelles by Perdrix et al. (1999). Consisting of 115 islands in the Indian Ocean, the Republic of Seychelles is a country where consumption of home-brewed, mostly unregistered beverages has been traditionally high. The research sample included 1067 persons aged 25-64 years who responded to a questionnaire designed in the local Creole language and administered by Seychelles nurses in a face-to-face interview. The following results of the study were seen: (1) among men, 51.1 percent were regular drinkers and had average intake of 112.1 ml alcohol a day; (2) among women, 5.9 percent were regular drinkers and had 49.7 ml alcohol a day; (3) frequency of drinking, but not amount per drinker, was slightly less in the 25-34-year than older-age categories; (4) home-brews were consumed by 52 percent of regular drinkers and accounted for 54 percent of the total alcohol intake; (5) the average annual alcohol consumption amounted respectively to 20.7 liters and 1.2 liters per man and woman aged 25-64 years. It is suggested that these values may underestimate the true figures by half, since reported beer consumption accounted for 53 percent of beer sales; (6) socioeconomic status was associated inversely with home-brew consumption, but positively with consumption of commercially marketed beverages.

In an exploratory study on alcohol abuse in Hong Kong Peng (1983) the extent of alcohol abuse and the impact of alcoholism was explored from four areas: (1) caseloads of family services agencies; (2) the commercial and industrial sector; (3) a small portion of the victims of industrial accidents; and (4) the clientele of the Society for the Aid and Rehabilitation of Drug Abusers. Blood alcohol levels, impact on family life, costs to society, absenteeism rates, on-the-job accidents, and other problems in industry are but a few of the areas discussed. Alcoholism is emerging as a pervasive problem in Hong Kong, with alcohol abuse found to lead to serious social consequences in individual cases. A significant proportion of industrial workers consume alcohol, some to the point
of impairing their skills, efficiency, and safety. The general public, business personnel managers, and family service social workers are not fully aware of the problem of alcohol abuse. There is strong social disapproval of alcoholism, while denial among alcoholics is prevalent.

Some occupations have higher alcoholism rates than others. It is unknown whether “high risk” occupations attract problem drinkers or create them through job pressures. In a study entitled “Occupation and Alcoholism- Cause or effect?” Plant (1987) interviewed 150 male manual recruits to Scottish breweries and distilleries and compared with similar men in lower risk jobs. The alcohol producers reported poorer employment records and were significantly heavier drinkers than the controls. The alcohol producers were also more likely than the controls to have drunk more since recruitment. Results suggest that the drink trade attracts a disproportionate number of people to develop alcohol-related problems and indicates that drinking habits may be strongly influenced by work environment.

Ritsmithai et al (1999) conducted a study to measure the prevalence of drivers with a blood alcohol concentration (BAC) over 50 mg/dl and to identify predictors for such an outcome. A cross-sectional study was conducted in eight provinces in Thailand. In each province, with the collaboration of the police, one checkpoint in a suburban area and one on a highway were used to collect data on drivers of 20 motorcycles, 20 4-wheel vehicles, and 20 larger motor vehicles, during three afternoon and evening time periods. For each subject, a breath test for alcohol was undertaken using standard breath testing instruments with 4,675 male drivers being tested. The crude prevalence of high BAC was 12.6 percent (range 4.5-23.7 percent). The differences in prevalence between the suburban area (8.7 percent) and the highway (8.4 percent) and between drivers tested on weekdays (9.8 percent) and on holidays (7.5 percent) were not statistically significant. The crude prevalences were 3.4-3.8 percent and 3.8-3.9 percent in
the 1300-1500 hours and 1700-1900 hours time periods, respectively. During the 2200-2400 hours time period the prevalence rose to 19.2 percent, 16 percent, and 11.9 percent among the motorcyclists, the 4-wheel vehicle drivers, and the larger vehicle drivers, respectively. High BAC among Thai drivers in the study period was very common, especially at night. Efforts should be focused on these high-risk groups and this time period. Demonstrated. None of the 7 percent who had a DSM-III diagnosis of an alcohol disorder had a job 5 years later, however, suggesting that alcohol-related selection to unemployment does occur.

Siassi and Crocetti (1983) in a study of a homogenous blue-collar population and the actual utilization by this population of a psychiatric clinics offering a comprehensive alcoholism treatment service, compare and contrast their findings with the national sample findings on alcoholism among blue-collar workers. Out of the 937 respondents, 59% were non drinkers. Of the 415 who are classified as drinkers, 67% were defined as heavy drinkers. More women than men were drinkers. Heavy escape drinkers were younger than the rest of the population, but otherwise age was not an important variable. There were fewer drinkers and heavy drinkers among the most educated, but the small numbers caution against any generalization, more Catholics than Protestants were drinkers, among both men and women. While compared to the national survey, in the present study 415 were found to be drinkers compared with 685 in the national sample. In the present study however, 67% of drinkers were heavy drinkers compared with 30% in the national survey.

Smart-Reginald- (1989) conducted a study on the relationships between drinking problems and the following: (1) Current employment status; (2) current occupation; (3) unemployment; (4) shift work; and (5) alcohol-related problems. A household survey of 993 persons in Durham, an area near Toronto, Canada, was conducted. It was found that the highest rates of problems were among shift workers and the unemployed. The workers most likely to have serious problems
were in processing and manufacturing, transport, artistic, literary, recreational, and sales areas. Males with serious problems and shift workers reported drinking more when unemployed. Sanctions for work-related drinking problems, even for those with serious dependency, were rarely applied. It is suggested that priority targets for programmes to assist employees with drinking problems should be males in the problem work areas listed above.

Shirley-C-E (1984) has found that one-sixth of the American work force has serious drinking problems. Since the progression from first drink to chronic alcoholism often takes 15 years or more, signs of trouble develop so slowly that both the family and supervisor of the problem drinker often ignore alcohol-related troubles until a crisis is reached. The employee may also fail to recognize the problem as a serious one. Eight patterns are listed that may indicate an alcohol abuse problem. The manager of the alcohol-impaired employee can influence the employee to accept professional help by offering a choice between counselling or disciplinary action. Seventy to 80 percent of troubled employees resolve their problems given such an impetus. All workers, from top executives to the lowest level employees, may have alcohol problems, with other drugs are often involved as well. Cocaine is the fastest growing drug abuse problem, especially among young urban males. Signs of cocaine abuse are listed, along with the national hotline telephone number.

This study by Thom and Judd (1999) examined the extent of alcohol involvement in young people's attendance at two London hospital accident and emergency departments and the potential for screening and intervention with young drinkers who are not alcohol dependent. Harmful drinking was found in 37.2 percent of patients 16-24 years old, as indicated by an Alcohol Use Disorders Identification Test (AUDIT) score of 8 or higher; 17.3 percent reported drinking alcohol in the 6 hours before admission; and 14.6 percent considered that their admission was alcohol related. AUDIT scores of 8 or higher were just as likely in young women as in young men. The odds of a high
AUDIT score were nearly twice as high in this group compared to those over 25 years old, and they were more likely to report that their admission was alcohol related. The authors conclude that alcohol screening in accident and emergency departments would identify considerable numbers of young people who might benefit from brief intervention, although the structure and organization of accident and emergency departments would present difficulties.

Lower socioeconomic status (SES) is generally associated with more health problems, and shorter life expectancy. A study by Van Oers et al (1999) surveyed 8,000 people to examine the relation between SES, alcohol consumption, alcohol-related problems, and problematic alcohol use. For calculation of odds ratios, the independent variable was educational level and the dependent variables were alcohol consumption, alcohol-related problems, and problem drinking. Educational level and abstinence were inversely related in both sexes. Excessive drinking was more prevalent among men in the group with the lowest educational level. No significant relation between educational level and prevalence of excessive drinking was found in women. The prevalence of psychological dependence and social problems among men was higher in intermediate educational groups after differences in drinking behavior were controlled. A negative relation was found between women's educational level and psychological dependence. Symptomatic drinking prevalence among women was higher in the lowest educational group. No relationship was found between problem drinking prevalence and educational level in either sex.

Native-American Indians, in addition to high rates of alcoholism, have the highest prevalence of a positive family history for alcoholism of all ethnic groups in the United States according to a study by Wall et al (2000). This study used the Achenbach Child Behavior Checklist (CBCL) to evaluate behavioral problems in 96 Mission Indian children and adolescents based on the presence or absence of parental alcohol dependence and sex of the offspring. Results indicated a high prevalence of a positive family history of alcoholism in these
Native-American youths. Of the offspring, 74 percent had either one or both parents with alcohol dependence. Only 7 percent had no first- or second-degree alcoholic relatives. Results indicated that sons of alcoholics scored significantly higher on the Total Behavior Problem scale, as well as the Internalizing and Externalizing scales, of the CBCL than sons of non-alcoholics, whereas there were no significant differences in CBCL scores between daughters of alcoholics and of nonalcoholics. It is noteworthy that scores on the SBCI for Mission Indian children of alcoholics were comparable to published scores of children of alcoholics of other ethnicities. A low percentage of youths were identified with significant levels of behavioral problems. These findings suggest that sons of alcoholics of Mission Indian heritage experience more problems than sons of non-alcoholics, but that Mission Indian children of alcoholics are not more vulnerable to behavioral problems than children of alcoholic parents of other ethnic backgrounds.

This longitudinal study by Walton et al (1999) examined the stability of alcohol problems among male and female older adults using structured diagnostic assessments and both alcohol consequence and alcohol consumption criteria when defining problem resolution. This study focused on the relationship between alcohol consumption and alcohol-related consequences over time, average and maximum consumption as indicators of alcohol problems, and reasons for changing drinking habits. Through advertising for health interview, 78 participants, and 55 years of age or older and with a history for lifetime alcohol abuse or dependence with no record of treatment, were identified through the Michigan Alcoholism Screening Test (MAST). An additional interview/assessment included the alcohol section of the Diagnostic Interview Schedule (IDS-IV), a lifetime alcohol pattern chart, and an elder-specific psychosocial questionnaire. Three years later, 48 of these participants were followed-up through re-interviews; no significant differences were seen between these follow-up participants and the original sample. An additional Spontaneous Recovery Questionnaire was developed and administered at follow-up.
At baseline and at follow-up, participants were ranked based on alcohol consumption risk and alcohol-related diagnostic symptom (problem). Results indicated that health problems were the most significant reason for changing drinking habits. The average and maximum consumption at baseline and follow-up were significant markers of follow-up risk group and follow-up alcohol-related consequences, respectively, with maximum consumption being more robust. Findings revealed that the course of alcohol problems among older adults fluctuated over time, and that heavy drinking appeared to be the best indicator of problem continuation.

Weisner et al (2000) describe the drinking patterns and examines the prevalence of heavy drinking and alcohol problems, and their association with other behavioral and social problems within the membership of a health maintenance organization, a setting in which increasing numbers of Americans receive services. The sample is representative of the stably insured membership of the Northern California Region of Kaiser Permanente Medical Care Programme; i.e., those who have been insured continuously under that plan for 30 months or longer. A telephone survey of the adult membership (N=10,292) was conducted between June 1994 and February 1996. As in other studies, health and mental health status and smoking were related to drinking levels, with symptoms higher for those in the heaviest drinking group. However, in contrast to studies of those using medical services, demographic characteristics (e.g., young age) were not associated with heavy drinking in this population. When controlling for drug use and drinking, however, women and those reporting any mental health symptom were more likely to report alcohol problems. The findings suggest that in private managed care populations, particular behavioral indicators may be more important than demographic characteristics in screening for problem drinkers. The identification of individuals who report a mental health symptom, who drink a large number of drinks occasionally, or who report drug use may be important in a health maintenance approach to prevention and case finding.
Zwerling (1996) points out that early rates of incidence of events used by proponents of drug-testing were that drug-abusing employees had three to four times more accidents at work, and five times the compensable injuries of other employees. Forty percent (40%) of industrial fatalities and 47% of industrial injuries could be traced to alcohol abuse. While not "...backed by substantive empirical evidence, they appeared plausible..." due to the impairment of motor coordination and perceptual abilities associated with alcohol and drugs (p. 161). In the early 1980s, figures used by politicians were: absenteeism, 16 times more for abusers than the average employee, and impaired workers functioning at approximately half their normal capacity.

The above studies have focussed on prevalence rate and patterns of alcoholism in general (Packer et al 1998, Peng 1983) and specific populations (Shirley 1984,). Emphasis on variables like education and socio-economic status (Oerstal 1999), age (Thom and Judd 1998), employment status and occupation (Reginald 1989) etc. As regards blue collar workers, a considerable number of studies (Siassi and Crocetti 1983), (Mckee et al 1989), (Marquinez et al 1992) etc have found higher prevalence rates for blue collar workers. The variables that have been associated with alcohol problems and excessive drinking range from nature and (Martti 1987), lower socio-economic status (Packer et al 1982), lack of awareness (Grasnof 1983) etc. However, the next section of this chapter focusses specifically on studies which have sought to probe into the etiological aspects of alcoholism.

II. ETIOLOGICAL CONSIDERATIONS.

Numerous studies probing into the factors contributing to alcohol abuse by industrial workers have been reviewed. Such studies range from general etiological contributions to social and culture specific precipitating factors in industrial settings, geographical, social, cultural and environmental factors,
besides specific organizational and work related factors have been discussed in various studies and an effort has been made thereby to identify the core precipitating factors that are most important.

Alasuutari (1987) in a study entitled "The Male worker's life story and alcoholics," analyses the "life-stories" of 54 alcoholic male manual workers out of which 12 have been admitted to a detoxification clinic. It is entirely based on qualitative interpretive method, on understanding (Verstehen) in the Weberian sense. The researcher concludes that drinking habits must always be explained in terms of their cultural context. In the case of blue-collar workers studied here. Drinking appears to reflect the tension between individual desires and societal restraints in a particular way. To achieve a sense of personal freedom, the man has externalized some of his self-discipline to the wife, he thus becomes - along with the foreman at work- a representative of societal constraints. Drinking, as expressive of the man's desire for freedom, is controlled by the wife, and provides the concrete issue around which the limits of male freedom are being negotiated. Loss of control then, becomes a way of making peace: when drinking is perceived as a craving beyond the man's will power it is no longer interpreted as an offensive form of behavior. To put the explanatory model, in other words, uncontrolled drinking comes about as a way of solving the cognitive dissonance caused by an individual's seeking to preserve simultaneously his social relations and his individual independence.

A study by Ames and Grube (1999) investigates the relationship between subjective social and physical availability of alcohol at work and work-related drinking. The authors integrated survey and ethnographic methods to determine if and why availability of alcohol predicted work-related drinking in a manufacturing plant with approximately 6,000 employees. Structural equations modeling of the survey data revealed that subjective social availability of alcohol at work, and particularly perceived drinking by friends and coworkers, was the strongest predictor of work-related drinking. Typical frequency and quantity of
alcohol consumption and heavy drinking were predictive also. Subjective physical availability of alcohol was not significantly related to drinking at or before work. Findings from the ethnographic analyses explained survey findings and described characteristics of the work culture that served to encourage and support alcohol availability and drinking. The results show relationships between alcohol availability and drinking at work, to explain dynamics of that relationship, and to demonstrate the potential risks of using only quantitative or only qualitative findings as the basis for prevention.

French, et al (1998) studied the prevalence and Consequences of Smoking, Alcohol Use, and Illicit Drug Use at Five Worksites The authors sought to determine whether different psychosocial work environments predict increased risk of illegal drug dependence. The study assessed individuals and their jobs in terms of a demand/control model found useful in prior work on cardiovascular disease, distress, smoking, and other health outcomes. Individuals with "high strain" jobs characterized by high levels of physical demands and low levels of skill discretion (with fewer kinds of tasks and fewer opportunities for on-the-job learning) were at higher risk. Unexpectedly, risk was also greater for workers having jobs characterized by high levels of decision authority, meaning that the worker had the ability to make decisions on the job, particularly concerning self-management and personal use of time. The largest risk was associated with active jobs combining high physical demands with high decision authority. These findings underscore the importance of previously observed relationships between certain psychosocial work environments and poor mental health.

Identity theory postulates that the psychological importance or salience of the job role may intensify relationships between job stressors and employee health. This study tested the moderating influence of job involvement on the relationships of work pressure, lack of autonomy, and role ambiguity to depression, physical health and heavy alcohol use. Data were obtained through
household interviews with randomly selected community sample of 795 employed adults. Moderator regression analysis provided limited support for the stress exacerbating influence of job involvement. Of 9 interactions tested, 3 were significant. Specifically, high levels of job involvement exacerbated the relationships between role-ambiguity and physical health, role ambiguity and heavy alcohol use, and work pressure and heavy alcohol use.-Frone et al (1991)

A thorough, comprehensive study of work-related alcohol abuse in which work alienation is related to the extent and consequences of alcohol use was done by Greeber, E.S. and Grunberg, L. (1995). This study examines the relationship between alcohol use and job dissatisfaction, as well as both aspects of work alienation: (1) Skill (skill level, substantive complexity, degree of challenge), and (2) Control (autonomy, decision making). These relationships were examined at the company level (through policies) and at the worksite level (through conditions). Experimenters hypothesized that work alienation, lack of autonomy, and job dissatisfaction would correlate directly with heavy drinking and negative consequences. The study revealed a more complex relationship. Alienating work seems to increase problem drinking indirectly through contribution to job dissatisfaction-this happens only when workers believe that alcohol is "an important and efficacious coping mechanism." Job autonomy was associated with increased alcohol problems, suggesting that there may be increased risks for work requiring a great deal of responsibility. As expected, participation in decisions regarding local working conditions was associated with lower incidence of alcohol problems. The findings suggest that two simple measures are likely to reduce alcohol problems: Give workers increased control over plant floor-level working conditions, including safety; and provide interventions to dissuade any belief that alcohol is helpful in coping with stress.
A study by Hollinger (1988) sought to find out the possible etiological factors for employee alcohol abuse. Data were analyzed with a focus on age, gender, social interaction with coworkers, and job satisfaction. The study results indicate that those employees most likely to work while under the influence of alcohol or drugs are males under the age of 30 who feel unhappy about their jobs and who socialize frequently with coworkers away from the place of employment after hours. Previous studies of the construction industry were successful in motivating employees with substance abuse problems to obtain treatment in order to save their jobs.

Kawakami et al (1995) studied the relationships between work stress and alcohol consumption in male and female employees of a computer factory in Japan. The following results of the study were seen: (1) higher scores for overtime, job overload, and job future ambiguity for male subjects; (2) higher scores on lack of intrinsic work rewards for female subjects; (3) a greater number of drinking problems for male subjects; (4) no significant difference between male and female subjects on amount of alcohol consumed per occasion; (5) a significant positive relationship between overtime and frequency and amount of drinking in male subjects; (6) a significant negative relationship between shift rotation and frequency of drinking in male subjects; (7) no relationship between work stressors and frequency of drinking in female subjects; (8) a positive relationship between job future ambiguity and amount of alcohol consumed per occasion in females; (9) a positive relationship between overtime and lack of intrinsic work rewards and problem drinking in males; (10) no relationship between depressive symptoms and frequency of drinking or amount of alcohol consumed per occasion in either males or females, although psychosocial stressors were related to depressive symptoms in males; and (11) a positive relationship between lack of intrinsic work rewards, job future ambiguity, and lack of social support at work and depressive symptoms in female subjects.
In a study aimed at testing the relationship between work stress and alcohol effects, Marcia et al (1990) hypothesized that work stressors lead to increased distress, which in turn promotes problematic alcohol use among vulnerable individuals. Vulnerable individuals are hypothesized to possess few personal and social resources for responding adaptively to work-related stressors and distress and to hold positive expectancies for alcohol's effects. The model was tested among 574 employed adults, using a combination of path analytic and hierarchical moderated regression techniques. Results reveal no support for a simple tension reduction model of work stress-induced drinking and only limited support for a social learning model. A much more circumscribed view of the etiological role of work stress in problematic alcohol use is indicated.

Martin (1984) tries to explain alcohol abuse as a response to perceived powerlessness in the organization by the employees. Data were collected from 293 employees and the tools used were the CAGE questionnaire to detect alcoholism and a job diagnostic survey reflecting responsibility and job autonomy. Results reveal that strong correlation between scores on the CAGE questionnaire and job diagnostic survey scores. The relationship between CAGE scores and perceived powerlessness also approached significance. Findings support the notion that stressful job dimensions are associated with and may help induce alcoholism among employees.

The relationship of non-enabling or well-structured work environments and recovery from alcoholism is discussed by Newton et al, (1988). The authors claim that haphazard work environment, which is physically in conducive, unhealthy and one in which inter-personal relationships are problematic may have a direct impact on alcohol and drug taking behaviour of the workers. In such an environment where authority has lost its hold on the employee and supervision is not strict, the management may have to lose control over the behavior of its workforce. Because the work environment may be a strong
influence on behavior, the provision of a structured work environment may be considered a practical recovery technique, assisting in the establishment of sobriety and the prevention of relapse.

Based on several research studies the National Institute on Alcohol Abuse and Alcoholism (1999) has enlisted the following as Factors Contributing to Employee Drinking in its newsletter drug alert (1999). According to the NIAAA, Drinking rates vary among occupations, but alcohol-related problems are not characteristic of any social segment, industry, or occupation. Drinking is associated with the workplace culture and acceptance of drinking, workplace alienation, the availability of alcohol, and the existence and enforcement of workplace alcohol policies. Work that is boring, stressful, or isolating can contribute to employees' drinking Employee drinking has been associated with low job autonomy lack of job complexity, lack of control over work conditions and products boredom sexual harassment, verbal and physical aggression, and disrespectful behavior.

The relationship between measures of stressful work conditions and high alcohol consumption was studied using cross-sectional data from a general population survey of 134 males and 140 females in the age group 20-60 years in metropolitan Stockholm in 1984. Among males there was a clear association between stressful working conditions and subsequent rise of several medical alcohol related problems but the precision of the estimates was low due to low number of cases. The strong but imprecise associations between stressful working conditions and severe alcohol problems are however challenging and warrant further studies preferably with longitudinal design and repeated measurements of both working conditions and alcohol habits. (Romelsjo-1993)

Discussing the implications of alcohol and work in Netherlands Rickborst (1995) claims that excessive drinking is not caused by a person's occupation. The causes of the excessive drinker's problems are most often primarily private.
The risk factors in certain occupations may, however, increase the probability of excessive drinking behaviour. A number of work situations are mentioned which have a stimulating effect on the use of alcohol. The most important factors are, the availability of alcohol, absence of supervision, tension, stress, danger and social pressure.

Puls et al (1999) studied the influence of effort-reward imbalance in the workplace on the consumption of alcohol in metal-working companies. A written survey of the correlation between job insecurity and alcohol consumption was carried out in three metal-working companies (n = 660). The path analysis evaluation of the recorded data show that, as was suspected, a significant influence of the intensity of gratification-critical situations on the amount of alcohol consumed can be verified. Strong inferences proving an association between the two were drawn. The effort-reward imbalance model is therefore a practical supplement to tried and tested work stress models in the field of addiction research as well.

Using a Toronto sample of 994 employed men and women, Roxburgh (1988) studied the gender differences and the effect of job stressors on alcohol consumption. Controlling for age, income, marital status, hours of work, and family history of alcohol abuse, results indicate that both male and female respondents in jobs high in substantive complexity consume significantly less alcohol than respondents in jobs low in complexity.

Shuckit (1987) reviews recent research on the importance of genetic influences on alcohol abuse and dependence. The contribution of genetic influences in alcoholism is supported by the 3-to-4-fold higher prevalence of this disorder in first-degree relatives of alcoholics, a rate that increases another 2-fold in identical twins of alcoholics. Adoption-type studies reveal that the increased risk remains strong for children of alcoholics adopted and raised by non-alcoholics.
The genetic influences appear to be, in large part, separate from a genetic predisposition toward dependence on other drugs.

Srivastava (1998) studied the specific impact of occupational stress and fatigue on the alcohol consumption of the workers in a mining industry. Alcoholism was identified among the workforce using the AUDIT questionnaire. Similarly, scales were used to measure occupational stress and fatigue. Associations indicate that the several sub-dimensions of occupational stress were positively associated with alcoholism. A high association was found between fatigue and alcohol problems among the respondents.

A cross-sectional survey as part of a Worksite Health Project in The Netherlands was conducted by Vasse, Nijhuis and Kok (1998) to test an interactive model on the associations between work stressors, perceived stress, alcohol consumption, and sickness absence. Regression analyses resulted in three major findings. First, in the presence of stress, abstinence increased the risk of sickness absence compared with moderate drinking. A significant relationship between excessive drinking and sickness absence was not found. Secondly, stress mediated the associations between stressor and alcohol consumption, and between stressor and sickness absence, although stressors also directly predicted sickness absence. Third, no direct association was found between work stressors and alcohol consumption. The association between abstinence and sickness absence could reflect medical problems of abstainers or a lack of skills for coping.

The correlates of drinking and drug use by higher education faculty staff are analysed by Watts et al., (1999) in a study which surveyed 850 university employees on their frequency and prevalence of drug and alcohol use. Responses showed alcohol and drug use within the last year and month among four occupational groups: faculty, administrators, clerical staff, and physical
plant/custodial staff. Stress was found to be weakly correlated with alcohol/drug use and moderately correlated with job satisfaction. Depression was correlated with heavy alcohol use, suicidal thoughts and drug use in the last year and month.

The above studies that were reviewed have focussed on etiology. The factors range from general socio-cultural factors (Rickborst 1985) to specific work related variables (Richmond et al 1999, Romelsjo 1993 etc) The variables specifically related to occupational settings that have been hitherto identified are as follows a) Psychological inner conflict between individual’s desire for freedom and social restraints (Alasutaari-1987) b) Physical availability of alcohol near the workplace (Ames and Grube 1999) c) Psycho-social work environment and workplace culture ( French et al, Newton et al 1999) d) work alienation (Greenberg and Grunberg –1985) e) Work stress ( Kawakami et al 1995) stressful working conditions ( Romelsjo 1987). The review has revealed an array of probable etiological factors responsible for the consumption and addiction of alcohol by the workers. Most of the studies as mentioned above have attributed workplace and work related factors as contributing more to the problem of employee alcohol abuse. This may either be due to the fact that work-related factors actually contribute more to the problem or because adequate research has not been done to study the relationships between non-work related factors. Whatever be the reason the enlisting of certain specific etiological factors has enabled the researcher to take into consideration these factors and test their probable relationships with workplace alcohol abuse in the current study. After an understanding of the etiology a thorough understanding of the various pathological manifestations , in other words .. the consequences of the problem are important because herein lies the rationale for undertaking a study of such a nature . Section III of this chapter reviews studies specifically pertaining to the consequences and manifestations of workplace alcohol abuse.
III. CONSEQUENCES AND MANIFESTATIONS OF WORKPLACE ALCOHOLISM:

It's an established fact that alcohol abuse by workers brings in its wake a host of undesirable consequences to the individual workers as well as the workplace in general. Studies have identified wide ranging consequences ranging from macro level economic costs to corporates and society in general to specific outcomes like absenteeism, tardiness at work, labour turnover, accidents, indiscipline, lost productivity, efficiency etc.

Ames, G.; Grube, J.; Moore, R. 1997 in a research article report on the relationship between drinking patterns and workplace problems in a manufacturing facility operated by a Fortune 500 industry. Bi-variate analyses indicated that overall drinking, heavy drinking outside of work, drinking at or just before work, and coming to work hung over were related to the overall number of work problems experienced by respondents and to specific problems such as conflicts with supervisors and falling asleep on the job. Multivariate analyses revealed that workplace drinking and coming to work hung over predicted work-related problems even when usual drinking patterns heavy drinking and significant job characteristics and background variables were controlled. Overall, drinking and heavy drinking outside the workplace did not predict workplace problems in the multivariate analyses. The analyses show that workplace problems are also related to age, gender, ethnicity, work shift, and departments. Although the relationships are modest, they support the hypothesis that work-related drinking and hangovers at work are related to problems within the workplace and may lead to lower productivity and morale.

The work by Berry and Boland (1998), especially as used as a basis for NIAAA studies is criticized on this basis as well. Berry and Boland count the lost production due to alcohol abuse as an irretrievable loss to society; thus, it counts as an economic cost. Tardiness, absenteeism, and temporary or permanent
withdrawal from labour force are seen as reducing the production of goods and services. As well, non-market activities or family-produced goods and services such as child care, housekeeping; meal preparation and recreation are also reduced and reflect a lower level of household production resulting in an economic cost. Although they state that the broad question of "How much more productive would alcohol-abusing workers be if they were not abusers?" as being unanswered, some limited questions, such as, "Given the present productivity of the worker as measured by his present wage, what are the costs of alcohol abuse to the firm?" have been used in designing studies. They cite work by Pelland D'Alonzo (1973) as revealing the nature of the problem. They note that"...the cost of alcoholism to industry is made up of several components, including loss of efficiency, absenteeism, lost time on the job as well as off the job, faulty decision making, accidents, impaired morale of co-workers, and the cost, of rehabilitation programmes. A large and significant portion of the economic impact of alcoholism also includes premature disability and death, resulting in the loss of many employees in their prime who have skills that are difficult to replace" (p. 37). That study is compared to an Australian study by Citing Cahalan, et al., (1972), Berry and Boland point out that drinkers who have difficulty functioning in society likely have lower productivity which is reflected in their earnings. This assumes that a dysfunctional group can be identified and labour markets will correct for the lowered productivity. Berry and Boland also estimate lost production due to alcohol abuse in the military. Accordingly, this loss of non-market activity is justified as a cost to society because producing national defence consumes an economy's scarce resources Casswell, and J.F (1995). have examined the economic costs of alcohol-related absenteeism and reduced productivity among the working population of New Zealand. Lost productivity accounts for a significant proportion of the total cost of alcohol. Estimates of reduced work efficiency were derived from US figures, which estimated a 25 percent reduction in work
performance among heavy alcohol users; 3.7 percent of the sample reported alcohol-related absences and 12 percent reported reduced efficiency days. There was a significant difference in both the number and cost of absentee and reduced efficiency days reported between the top 10 percent and the bottom 10 percent drinkers. A conservative estimate of alcohol-related lost productivity among the working population of New Zealand was found: $57 million per year.

The economic cost of lost production in New Zealand due to alcohol abuse is estimated by Chetwynd and Rayner (1998). Four categories of lost production are examined including excess unemployment amongst abusers, decreased efficiency of abusers in the workplace, temporary withdrawal from the workforce due to alcohol-induced illness or accidents, and permanent withdrawal from the workforce due to the premature death of abusers. Assuming full employment, a 4.3 percent prevalence rate of alcohol abuse, and a 3:1 ratio of male to female abusers, the study presents estimates of costs for a range of possible abuser employment levels. The findings indicate that the cost of lost production due to alcohol abuse was between 4582 million and 4770 million for the 1981-82 financial year. This was equivalent to between two percent and 2.3 percent of GNP for that year.

Relevant information on the effect of alcohol problems at work on economy and efficiency in the United Kingdom is reviewed by Crofton (1987). About 9 percent of males in Great Britain have alcohol problems at work. Although heavy drinkers have a higher rate of work problems, the majority of these difficulties occur in light or moderate drinkers, because such drinkers are far more numerous. Data are provided on impairment of skills, hangover rates, alcohol-related accidents, and lunchtime drinking. Estimates of the economic costs of alcohol problems vary from 60 million pounds to 2 billion pounds per year. A number of organizations, such as the Scottish Council on Alcohol, the Health Education Council, and the Institute of Alcohol Studies, are trying to encourage the inception of alcohol policies in the workplace.
Results of a survey conducted by Du Pont (1980) de Nemours and company indicated that alcoholic employees had significantly higher rates of sickness absenteeism than nonalcoholic employees over a 1-year period. The disability rate among alcoholic employees exceeded that of nonalcoholic controls by 7.2 days per person per year. Absenteeism among known alcoholic employees, as distinct from suspected or recovered alcoholic employees, exceeded that of the controls by 14 days per person per year. Absenteeism of the alcoholic group was greater than that of the nonalcoholic group in every major diagnostic category except for disorders of the urinary system; the excess was greatest for accidents, muscular skeletal disorders, and digestive disorders. Age, sex, and occupation appeared to have little influence on the excess of alcohol-related absenteeism. The findings leave little doubt that excessive drinking produces excessive absenteeism in some alcoholic employees.

Franklin et al. (1998) studied the risk of job-related injury in construction workers who carry a diagnosis of alcohol abuse. The data were derived from records for construction labourers in Washington State who were covered by health insurance through the local union and workers'. The following results of the study were seen: (1) in the total number of 7,895 labourers, 422 had a diagnosis of substance abuse; (2) the rate of time-loss injuries per 100 full time workers was 15.1 in those with a diagnosis of alcohol abuse and 10.9 for those without; and (3) for workers ranging in age from 25 to 34 years, the rate of injury was 23.6 for substance abusers compared to 12.2 for those who were not substance abusers. It is suggested that interventions might be targeted at younger workers with an aim of reducing the level of alcohol abuse and thereby preventing job-related injuries.

A large body of medical literature reviewed by French (1993) suggests that alcohol and illicit drug use adversely affect social, cognitive, and psychomotor functioning for many individuals. These adverse conditions are often linked to emotional and physical problems at home, in the classroom, and in the
workplace. Recently, economists and other social scientists have begun to explore the labour market effects of substance use through statistical analyses of large national data sets and worksite-specific samples. Contrary to popular belief and earlier econometric studies, most of the current research is finding a positive or insignificant effect of substance use on earnings. However, other studies have found that substance use has a statistically significant effect on labour supply, absenteeism, retention, and various job performance measures. This paper critically reviews the literature on the effects of employee substance use on earnings and workplace behavior and discusses the significance of the findings for employers, policymakers, and public health practitioners.

Absenteeism was tested by Hendrix and Spencer (1989). The subject group included 443 civilian employees from the Department of Defense and confirmatory path analysis (LISREL VI) was used to test the model. Exploratory path analysis was performed to establish the paths leading to absenteeism, as a poor fit had been found between the research model and the data, following which a new model was developed. The results provided partial support for the model, but indicated that the relationships between absenteeism and the independent variables used (including colds/flu, alcohol consumption, job satisfaction, and pay grade; n=14) were more complex than anticipated. Absenteeism is decreased by high job involvement and commitment to the organization, is increased by burnout and cold/flu episodes, and appears to be moderately affected by alcohol involvement. The revised model provides a better fit than the original model and will be useful in future research.

Hoffman and Larison (1999) have tried to find out the relationship between workplace accidents and employee turnover and alcohol and drug abuse. Using data from a large, representative sample of the U.S. population, a detailed analysis is provided of the relationships among drug use, work-related accidents, and employee turnover. The results indicate that various measures of alcohol
use are not associated with work-related accidents. However, several types of drug use are related to the risk of being fired or resigning from a job in the previous year. Moreover, the risk of being fired varies by occupation. So though this risk entails a higher rate of turnover for alcohol and drug prone employees, the association between alcohol use and industrial accidents is not very clear.

Holder, H.D.; Blose, J(1991).compared the occupational and non-occupational-disability payments and work absences for alcoholics and non-alcoholics. Disability payments and work absences for alcoholics and non-alcoholics were compared. The study data were taken from records maintained over a period of 14 years from a mid-western manufacturer who employed approximately 60,000 workers. From these records, 1,828 employees who received a diagnosis indicating a chronic drinking problem were compared with a similar group with no history of alcohol-related problems. The study results revealed that the alcoholic group had greater absenteeism and higher average overall indemnity payments of 41,272 per year compared to payments of 4671 of the nonalcoholic group. These higher costs appear to be non-work-related.

The ways in which alcohol and other drug-related problems affect employer costs are examined by Iverson-D.C(1990) including the effect on employees' abilities to perform assigned tasks effectively and efficiently, the percentage of on-the-job accidents, the negative impact on the morale of coworkers and supervisors, increased health care costs, excessive use of sick benefits, and reduced productivity. The process is outlined by which a successful evaluation of an employee assistance programme can be conducted. Initially, the purpose of the evaluation must be identified. Secondly, the scope and method of operation of the programme being evaluated must be understood. Third, anticipated programme results, both impacts and outcomes, need to be determined. Fourth, the data needed for measuring programme results and the sources of that data
must be identified. The forms and instruments for data collection and measurement need to be developed, and the evaluation design selected. The next step is the development of appropriate protocol for the evaluation, with specific instructions written for all aspects of the evaluation. Writing the evaluation report culminates the evaluation procedure.

An article by Jenkins et al (1993) reports a six-year follow up (1980 to 1986) of a cohort of male and female white collar workers in whom there was baseline information on alcohol consumption and access to details of sickness absence, promotion and turnover of labour. It was found that men drinking over 21 units of alcohol a week in both 1980 and 1986 took twice as much absence, measured in both total episodes (spells) and total duration than men drinking less than 21 units of alcohol. The corresponding safe limit for women is 14 units of alcohol a week, but at this threshold, no consistent pattern of excess sickness absence emerged. An association was observed between alcohol consumption and promotion. Women who had been promoted to a senior position by 1986 drank much more than those who had not been promoted, whereas the reverse was true for men. A relation found between alcohol consumption and turnover of labour was not statistically significant although the trend was that those subjects who subsequently left had higher intake of alcohol in 1980 than those who remained. It is concluded that even moderate alcohol consumption in the working population is associated with social costs for the employer and the employee including substantial sickness absence and lack of promotion in men. It is suggested that early intervention in a drinking career may reduce alcohol consumption.

Macdonald and Lothian, (1998) compared the lifestyle and substance use factors related to accidental injuries at work, home and recreational events. To determine whether different factors were related to different kinds of accidental injuries, chi-squared tests were made among five injury groups: no
injuries; injuries at work; injuries at home; injuries at recreation; and multiple injury episodes (two or more separate injury episodes in two different settings). The initial comparisons were between those with no injuries and each of the four injury groups. Persons with multiple injury episodes were significantly more likely than those with no injuries to be single, under 30 years of age, and have lifestyle problems (sleep problems, financial problems, and a desire for counselling) and use substances (cigarettes, alcohol, licit drugs, and illicit drugs).

Eight factors were significant altogether for comparisons between each of the work, home, and recreational injury groups and the no-injury group, but no single factor was significantly related to more than one injury group. Contrasts between all combinations of injury group pairs (the no-injury group excluded) indicated that risk factors for those with multiple injury episodes differed significantly from those with home and recreational injuries with several characteristics. The findings from this exploratory study provide some support for the hypothesis that risk factor may vary depending on the injury group.

The purpose of a study by Mangione et al (1998) was to examine the independent effects of a variety of drinking indicators on self-reported work performance. Data from a cross-sectional mailed survey of managers, supervisors, and workers (N=6,540) at 16 worksites were analyzed. Average daily volume was computed. Drinking on the job included drinking during any of six workday situations. The CAGE was used to indicate alcohol dependence. Employees were also asked how frequently they drank to get high or drunk. Work performance was measured through a series of questions about work problems during the prior year. The results indicated that the frequency of self-reported work performance problems increased, generally, with the four drinking measures. In a multivariate model that controlled for a number of demographics, job characteristics, and life-situations, average daily volume was no longer significantly associated with work performance but the other three drinking measures were. Although moderate-heavy and heavy drinkers reported more
work performance problems than very light, light, or moderate drinkers, the lower-level-drinking employees, since they were more plentiful, accounted for a larger proportion of work performance problems. It is concluded that employers should develop clear policies limiting drinking on the job and, in addition to employee assistance programmes for problem drinkers, should develop worksite education interventions to inform all employees about the relationship between drinking behaviors and work performance.

A study undertaken by Mangione, T.W; Howland, J; Lee, M (1998) supported by the National Institute on Alcohol Abuse and Alcoholism (NIAAA) and the Robert Wood Johnson Foundation (RWJF) surveyed 7 corporations, 114 worksites, and almost 14,000 employees regarding alcohol policies and practices. Highlights of the study are: (1) most alcohol-related work-performance problems are caused by employees who would not be considered alcohol dependent; (2) drinking patterns away from the workplace can affect work performance at the worksite; (3) managers are over three times as likely to drink during working hour than hourly workers; (4) even within the same companies or organizations, workgroups and worksites develop their own drinking microcultures that influence how an employee drinking at and away from work; (5) estimates of losses in productivity because of alcohol exposure do not account for secondhand effects, such as injury and effects on non-drinking workers; and (6) many supervisors responsible for enforcing alcohol policies do not know what the company policies are. Enoch Gordis, Director of NIAAA states that "this important study provides further evidence that performance problems in the workplace are not only related to alcohol dependence (alcoholism) but also to drinking by non-dependent employees in ways that impact the job performance."
Manning, et al. (1997), looked at the cost of poor health habits in general (smoking, drinking and sedentary life-styles). They measured direct costs as lost wages, the portion of health care costs paid by employees, disability, and premature death. These were defined as internal costs but the emphasis in the book is on external costs; what smokers cost non-smokers, what heavy drinkers cost abstainers or moderate drinkers, and what voluntarily inactive people cost those who exercise regularly. They cite a figure of $20.6 billion in lost productivity due to alcohol abuse in the U.S. in 1985 (p. 3). The $85 billion (1986 dollars) estimated by Berry and Boland for 1971 and $129 billion (1986 dollars) estimated by Harwood for 1983 are cited as total external costs, not just productivity losses. To emphasize how the use of cost influences calculation, it is interesting to note that Manning, et al., analyze costs in terms of cost per unit. This stems from the idea that the "...magnitude of these external costs can be used to gauge the appropriate level of excise taxes on alcohol and cigarettes". This also drives the inclusion/exclusion factor when analyzing costs.

As part of the Whitehall II study (Marmot at al -1996) conducted by the Socket for the study of Addiction to Alcohol and other drugs the relationship between different drinking patterns and sickness absence is examined. Drinking patterns and sickness absence are examined for short spells (equal to or less than 7 days) and long spells (more than 7 days) adjusting for other causes of sickness absence: age, grade of employment, smoking, work characteristics, and baseline health. Alcohol consumption was strongly related to employment grade, the lower the grade the higher proportion of men and women reporting no alcohol consumption. For men the relation of alcohol intake to short spells of sickness absence (equal to or less than 7 days) appeared to bell-shaped, for long spells (greater than 7 days) increased rates of absence were found only in frequent drinkers. There was no clear relationship for women, however higher rates of sickness absence were found in non-drinkers?
The persistence of performance impairment in flight-related skills during the decline of BAC has been established by prior research. A study by Millar et al. (1999) tested the hypothesis that the monotony of repeated testing in this phase along with alcohol-induced fatigue combine to further impair performance. Results indicate that repeated performance conditions were associated with significantly greater impairment of secondary reaction time and sustained attention compared to the double performance conditions. However, alcohol effects were greatest at peak BAC and performance conditions did not interact with alcohol effects. It is concluded that the monotony and boredom possibly associated with repeated performance do not contribute to residual alcohol impairment.

In a study conducted at the Georgia Power company, the relationships between drug abuse and various measures of workplace performance were examined by comparing records who were referred to the employee assistance programme or entered treatment for drug abuse with a group of matched controls for the year prior to referral or treatment. Abusers were found to have consumed almost twice the medical benefits as controls, to have been absent 1.5 times as often and to have made over twice the number of worker’s compensation claims. Although alcohol and its consumption in the workplace is not the most frequent and most serious cause of industrial accidents, it would be wrong to underestimate the impact of alcohol use on work performance and accidents according to a research paper from the Czech Republic by Milos Palecek. (1995).

Muhlemann-R; Sommerauer-M. (1979) in a 10-year retrospective study compared absences from work among 64 Swiss alcoholics and 192 matched controls. Absences longer than 3 days accounted for an average of 28 days lost annually for alcoholics and 11 days for controls, and the average annual numbers of absences were 0.90 and 0.48, respectively (p < .01). Absences shorter than 3 days accounted for 1.85 days lost for alcoholics was 0.99 days for controls.
(p < .001). The estimated average costs of all absences for the 2 groups were 3404 was 1116 Swiss Francs in 1975. Of 35 of these alcoholics who were treated with disulfiram cyan amide, 8 relapsed within 3 years and the others remained totally abstinent for at least 3 years.

Mullahy et al (1995) in a working paper discuss the consequences of worker alcoholism with special reference to the work and career of males, its relative impact on income structure, certain social characteristics and status variables and the overall implications for the life-cycle of the workers. Issues like labour force participation, socio-economic environment, employment and opportunity structure are dealt with. Findings indicate that alcoholism decreases labour force participation among prime age males, and therefore decreases the income of this group, the effects of alcoholism on the labour force participation of younger and older males and on the wage rates of prime age males are not significantly positive. It was also found that alcoholism affects income indirectly through its effects on individual characteristics such as schooling and marital status, as well as directly through labour force participation rates after controlling these effects. Asserting that alcohol and drug use in the workplace is considered one of the most serious problems currently facing business and industry, the authors go to establish the link between substance abuse and industrial productivity. According to the authors, illegal drug use at work has been estimated to cost $30 billion in lost productivity, while workplace alcohol abuse has been estimated to cost $60 billion.

Alcohol consumption has been found to be associated with injury occurrence and with risk-taking dispositions, and these dispositions, themselves, have been found to be associated with injury. Few studies have analyzed both alcohol consumption and risk-taking dispositions, or illicit drug use, on risk of injury across all types of injuries. Data on risk perception, risk-taking/ impulsivity, sensation seeking, alcohol and drug use, demographic characteristics, and injury
in the last year are reported from the 1995 National Alcohol Survey of 4925 respondents living in households in the 48 contiguous states. Moderate drinking, alcohol treatment, drug use, simultaneous use of alcohol and drugs, and risk-taking dispositions were all positively associated with reporting an injury. In multiple logistic regression, only risk-taking dispositions maintained significance when other variables were controlled. Data suggest that risk-taking dispositions may be more important predictors of injury than either drinking or drug use variables, but this may vary by ethnicity. Risk-taking disposition may influence the effectiveness of strategies to reduce alcohol-related injuries; future research is important, therefore, for informing intervention and prevention efforts.

As part of the report on the economic costs of alcohol abuse and alcoholism by the Research Triangle Institute. Podolsky (1985) comes out with an interesting finding that 89.5 billion dollars was the estimated cost due to alcohol abuse in the year 1980. According to the RTI report, problem drinkers were found to be 21% less productive when compared to otherwise similar persons. Besides, potential indirect productivity losses from fetal alcohol syndrome or in other words the resultant of consuming of alcohol by pregnant women workers was estimated to be 510.5 million dollars- the costs of treatment and recurrent expenditure including. Other major losses include man-days lost due to worker absence (because of alcohol consumption) productivity loss, sickness related expenditure and costs in terms of insurance of other irresponsible decisions and delays besides the occurrence of drinking related accidents.

Four levels of blood alcohol concentration (BAC), eight levels of task difficulty, and two incentive conditions were examined by Price and Flax (1993) for their effects on hits and misses in a simulated drill press operation. Hits were defined as inserting the drill probe within a hole in a plate without touching the probe to the plate. Misses were defined as drill probe strokes in which the drill probe...
touched the plate. The independent variables of BAC, incentive condition, and task difficulty were presented using the principle of counterbalancing. There was a significant effect of alcohol on hits, with a decrement of 12 percent and 19 percent at the 0.06 percent and 0.09 percent levels, respectively. Incentive conditions had a significant effect on both hits and misses. Task difficulty also had significant effects on hits and misses. There was no evidence of meaningful interactions among these main effects; interactions between task difficulty and BAC were statistically significant but the pattern did not support the hypothesis that as task difficulty increases performance is more adversely affected by increased levels of alcohol. Implications of these results for industry are discussed. This has great implications for industrial workers in that the performance of the workers and its relationship with their BAC level may act as indicators of the pathological consequences of alcoholism at the workplace.

Poikolainen et al (1987) studied the regional distribution, morbidity and rehabilitation needs of 104 work disability pensioners who we added to the pension lists in 1971 primarily because of alcoholism. 76% of the samples lived in towns. 11% had experienced a change in life situation which contributed to loss of work capacity. 82% had chronic somatic illness, 11% had T.B. and 8% had cirrhosis. Dementia or psychosis occurred in 21% chiefly because of alcohol. It was estimated that 1% were able to work under prevailing conditions and 53% could work in ideal rehabilitation conditions.

Rodriguez et al (1989) focus their study on the alterations in the family and work dynamics of the alcoholic individual. They studied the family and work dynamics of 30 male alcoholic out-patients 15-40 years old. 50% were married, and 33% were divorced. 665 had a high school or university education. Sample relatives, and coworkers were interviewed. Data analysis revealed that 935 of married samples had conflicts with spouses. 60% had conflicts with their children, 635 had problems with other family members and 23% had conflicts
with neighbours. 40% had a significant rate of work absenteeism, 23% were reprimanded or penalised for negligence or lack of discipline, 205 had conflicts with superiors and 13% had problems communicating with fellow workers. The findings demonstrate the significant adverse social effects of alcoholism.

Saad and Madden (1987) focus their study on the consequence of certified incapacity and unemployment of alcoholics. The study was conducted in Bridgewater hospital, Manchester. 73 Male alcoholics permitted information to be obtained from official sources about time recorded as lost from work in receipt of sickness or unemployment benefits and about their weekly state insurance contributions. The average yearly time loss was 121.7 working days person, comprising an average yearly loss through sickness of 86% and through unemployment of 35.6% working days, respectively. By contrast the recorded national sickness loss of males in a comparable 12 month period averaged 15.9 working days/person. 13 alcoholics showed, over 5 years, prolonged deficiency in work attendance, state benefits to the samples, over 12 months during the early 1970s. totaled more than 18,000 British pounds. Diagnoses on their medical certificates under-estimated incapacity from alcoholism.

Schmidt-S. (1989) has studied the Relationship between absenteeism and alcoholism in the industrial setting in a descriptive study which examined the possibility of an absenteeism pattern unique to the alcoholic employee is presented. The absenteeism records of 27 known alcoholics from the other industry were analyzed and compared with the absenteeism records of 28 nonalcoholic high absenteeism employees. A one between one within analysis of variance indicated that there were no differences between the absenteeism patterns of these two groups. However, excessive absenteeism was identified in the alcoholic groups. The mean days absent for the known alcoholics was 19.48 days per 13 months, 17.2 days per 13 months for the suspected alcoholics, and 13.48 days for the nonalcoholic high absenteeism group. The US Vital Statistics
indicate an overall national average of work loss days to be five days per year. Several health problems, which might be related to absenteeism, are discussed, and areas for future research are suggested.

Using studies at General Motors Shahandeh(1996) derived the following estimates: twice as many occupational injuries, 15 times the visits to the medical department, and 25 times more days of disability leave for drug-dependent employees than non-drug dependent workers. Alcoholics have 16 times the absences, two-and-a-half times as many absences of eight days or more, five times the compensation claims, three times more sick leave, and three times the accident rate of other employees. Another study using control groups showed that the combined on-the-job and off-the-job accident rate for alcohol-dependent workers was 3.6 times that of the controls.

In a review paper analysing the occurrence and epidemiological features of alcohol related occupational injuries, Stallone and Jess (1993) review published literature on alcohol related occupational injuries. According to them the literature on occupational injuries is sparse although there is a strong belief that alcohol may contribute to injuries in the workplace. Although 7% of workers are injured annually in an occupational setting, less than 4% of these injuries appear to be related to alcohol. Past studies, however, have not used a comparison group or had accurate counts of workers at risk. Hence, conclusions are attributable to risk of alcohol consumption or use have not been consistent across studies, so comparison of the results of some studies are not valid. There are no studies which examined variables which may confound the observed relationships between injuries and alcohol. These variables include other characteristics associated with risk or injury, including existing health problems, medical disabilities such as deficits in hearing or visual faculties presence of other drugs, chemicals and metals to which the worker was exposed, and job hazards which may increase risk of injury. Earlier studies were not designed to assess the risk to others resulting from alcohol use in a worker. This review
shows that the true magnitude of the problem of alcoholism and alcohol related injuries has not been accurately assessed and the epidemiology features of this problem group has not been properly evaluated.

A cross-sectional survey as part of a Worksheet Health Project in the Netherlands was conducted by Vasse, Nijhuis and Kok (1998) to test an interactional model on the associations between work stressors, perceived stress, alcohol consumption, and sickness absence. Regression analyses resulted in three major findings. First, in the presence of stress, abstinence increased the risk of sickness absence compared with moderate drinking. A significant relationship between excessive drinking and sickness absence was not found. Secondly, stress mediated the associations between stressor and alcohol consumption, and between stressor and sickness absence, although stressors also directly predicted sickness absence. Third, no direct association was found between work stressors and alcohol consumption. The association between abstinence and sickness absence could reflect medical problems of abstainers or a lack of skills for coping with stress. The failure to find a significant detrimental effect of excessive drinking may have been due to use of a low threshold for excessive drinking and/or low statistical power. Prospective studies are needed to gain insight into causal relationships between variables concerned.

Webb et al (1994) aimed to determine whether there are relationships between problem drinking and high alcohol consumption and outcomes such as work injuries and related absences. Chi-square analyses revealed significant relationships between problem drinking and work injuries and injury-related absences, but not between high alcohol consumption and work injuries and related absences. Logistic regression analysis revealed that no variables were significant predictors of work injuries. However, when uninjured subjects were excluded, a second analysis revealed that Mortimer-Firkins test scores, recent stressful life events, age and job satisfaction were significant predictors of two or more injuries. Injured subjects were almost twice as likely to have two or more
injuries if they had high numbers of recent stressful life events and low levels of job satisfaction. Logistic regression analysis revealed that age, Mortimer-Fill-ins test categories and job satisfaction significantly predicted injury-related absences. Problem drinkers were 2.7 times more likely to have injury-related absences than non-problem drinkers, and subjects with low levels of job satisfaction were 2.2 times more likely than others to have injury-related absences. The implications of the results for workplace alcohol policies and programmers are discussed.

Zwerling et al (1996) studied reports on relationships between alcohol use and occupational injury among workers aged 51-61. Persons drinking five or more drinks per day were more likely to have blue-collar jobs that were identified a physically strenuous. Researchers found a positive association between having had an injury on-the-job in the past year and answering "yes" to some of the alcohol screening questionnaire questions. Moderate drinkers (one to two drinks per day) had the lowest injury rates, while the injury rate for teetotalers and those drinking five or more drinks per day were considerably higher. Including specific impairments, such as hearing, eliminated alcohol as a predictor in the regression equation. Impairments were associated with a higher incidence of heavy drinking. Based on these data, it is unclear whether drinking causes impairments, and thus affects injury rates, or whether impairments are independently associated with both injuries and drinking.

Studies quoted above have identified the relationships between employee drinking and consequences for the workplace and have come out with as varied consequences as a) Economic costs due to lost production (Cass well et al 1995, Iverson 1990); b) impairment of work performance and personal productivity and efficiency of the worker (Grebe et al 1997, Berry and Boland 1998, Mullah et al 1995); c) absenteeism and sickness leave (Blasé 1991, Schmidt 1989); d) injury and work related accidents (Hoffman and Larson 1999); e) employee turnover; f) Indiscipline and deterioration of work relations—(Lothian 1988,
Mangione et al. 1998) etc. The predominant consequences identified were absenteeism, injury and accidents, lost production and turnover. An analysis of the above consequences would reveal that all factors mentioned cause substantial loss to the employers in terms of lost compensation, health costs, lost production and loss of able manpower. Hence negligence on the part of the employer could cost him substantially in the long run. Understanding the consequences of the problem and analyzing its gravity, employers frame policies and strategies to manage alcohol problems. The various measures, policies and strategic initiatives adopted by the employers' have been studied by a considerable number of social researchers. Such studies have been reviewed in the next section. (Section IV) which is all the more crucial to the current study, which also primarily focuses on corporate policies and strategies, causes and consequences being secondary issues.

IV. RESPONSES OF CORPORATES, POLICIES AND STRATEGIES, LEGAL ISSUES, ETC INCLUDING EMPLOYEE ASSISTANCE PROGRAMMES

As the policy implications, industrial responses, industrial alcohol programmes, Employee assistance programmes etc form the core of the present research, this section has been given due importance in that, studies covering a wide range of dimensions with regard to policy issue have been reviewed, categorized and presented. This section has been divided into the following subsection (a) Important experiments at the international level and development of alcohol policies worldwide (b) Prevention efforts by corporates including employee drug testing and the issues concerned with prevention (c) Legal issues regarding policies and intervention. (d) Intervention strategies including the importance development and role of employee assistance programmes (e) the effects of the corporate policies on employee behaviour, the necessity and importance of follow-up, job-re-entry, rehabilitation etc and finally (f) the responses and feedback of the employees with regard to the policies.
a. Important experiments at the international level and development of alcohol policies worldwide.

Csiernik Katona (1995) describe the medi-consult EAP approach in Hungary. In Hungary per–capita alcohol consumption has continually increased from the 1960s to the present. Hungary is among the first five countries in the world top list of per capita alcohol consumption. Medi-consult Ltd. is a private health care advisory, organisatory and consultancy firm which was established in 1971. The Employee assistance programme of Media-consult LTD is an industrial health care and wellbeing project with the aim of tackling the Hungarian alcoholism problem. The Medi-consult approach is the first attempt to adopt and adapt the Employee assistance Programme concept in Hungary. The Medi-consult approach has the following objectives 1) addressing the health and economic problems caused by alcoholism in Hungary- 2) demonstrating cost-effectiveness of an industrial human resource tool which can save money for the health as well as for companies 3)raising awareness of alcohol problems and introducing a way of approaching problem drinkers to employers, trade unions, health care financing bodies, treatment providers and the general population 4) fostering early alcoholism treatment through help with setting up and financing EAP services. The EAP service of Medi-consult is the first such endeavor in Hungary. The co-worker and the network of clinical workers and services of Medi-consult EAP have extensive experience in screening for addictive diseases.

Jakson (1995) traces the evolution of a workplace alcohol policy in Latvia. A new state alcohol and drug policy was developed in the 1990s in Latvia after the nation became independent. The national programme restricting expansion of alcohol and narcotics addiction which is coordinated by a special inter-ministerial commission was formulated. One of the most important parts of this programme is the legislation about the control of narcotics and the limitation of the alcohol trade. The conditions of limited financial possibilities set the ground for the following developments in the filed of prevention: 1). Information on
drug and alcohol-related crimes and negative psychological and physical effects on individuals. 2) Training of teachers, general practitioners, social workers, journalists concerning addiction and methods of prevention. 3) Special educational programmes for children and adolescents 4) support for organizations attempts and initiatives directed towards the prevention of addiction. 5) Renewal of protection of workers from drugs and alcohol in the workplace. In 1991 the Latvian officials in collaboration with the Swedish officials started the worker alcoholism programme. The programme started with the education of managers, assessment of the situation in participating companies, and creation of support groups in the workplace. Today, it is possible to distinguish the following stages and methods of treatment: The first stage is usually is detoxification and elimination of withdrawal symptoms. In less serious cases, help is provided on an out-patient treatment basis. Much attention is paid to delirium therapy. In the next stage, patients are involved in therapy, following the Minnesota model, as well as in traditional biological alcohol treatment therapy on an in-or-out-patient treatment basis. Working principles are 1) rational psycho-therapy 2) Anti-withdrawal therapy 3) therapy focussing on psychiatric symptomatology 4) aversion therapy - mainly antabuse. In serious cases of alcohol dependency, long term residential care is provided. In all cases, patients are encouraged to join AA, to visit counsellors for long term after-care.

The European transformation during the 1990s, concerning political, economic, social, and cultural changes, has made alcohol policy in many countries very fragile and uncertain because of new social and economic conditions and decreasing power of national governments according to Larsson and Harison (2000). On this background, regions, municipalities, non governmental organizations, and the civic society are to play a more prominent role in the European alcohol policy arena. In December 1997 the first European research and evaluation symposium on community action alcohol programmes was held in Malmo, Sweden. The themes were: research-based evaluation of community action programmes; the interaction between local, national, and European...
prevention strategies; local programmes in schools, workplaces, health sectors, primary health care, and other community contexts; the role of citizens movements, consumer organizations, women's groups, and other voluntary organizations; and local political action. This paper is the first attempt to summarize the similarities and differences in the programmes presented at the symposium.

Rik Biil – Lacon foundation Netherlands (1995) summarises the recent study undertaken by the ILO and CEC in Europe on the problem of workplace alcohol and drug issues. One of the main activities he ILO has been engaged in is a project, a joint initiative of ILO and the Commission of the European communities started in 1992. The project was undertaken in order to increase the understanding of 1) the nature of these problems in the 12 countries of the European union and ii) the attitudes, policies and programmers developed in these countries to prevent problems and assist those workers who need it, the focus of the study is descriptive. A common data collection instrument for this purpose was established by the ILO, CEC, with versions appropriate to enterprises, and secondly to employers' and workers' organizations. A total of 237 participants from these three categories completed the questionnaires. Of the total number of 237 enterprises are the largest category with 111 completed questionnaires, compared to 45 employers' organizations and 81 workers' organizations. The main findings of the study were as follows. A) workplace alcohol and drug problems are perceived as serious, but generally speaking alcohol was viewed as the substance with the most serious consequences for the workplace. b) Although national frameworks for workplace policies do not exist, laws and regulations on availability, hours of sale, and legal age-limits – combined with a self-regulating approach-leave workplaces free to set alcohol policies. C) Workers, employers and enterprises agree that drug and alcohol policy is an area on which broad agreement can be reached. Respondents also agree that supervisor/management training is essential for an effective policy.
They differ in that workers, more than others, accept the possibility that conditions of work and employment, and stress levels may contribute to alcohol and drug problems. Workers are also more likely to see supervisors and managers as not having sufficient skills to identify problems among the workers.

d) The nature of the enterprise responses to alcohol and drug problems is most often to provide information and to a lesser extent, to offer health promotion activities. Almost all of the enterprises in this project have a personnel or welfare department and 75% of them have a medical department within the enterprise. External resources are primarily self-help groups, such as AA, and state funded medical, social care or treatment facilities.

Woydyllo and Morewski (1995) describe the ILO experiment with regard to alcohol and drug prevention at the workplace in Poland. In 1993, with the perennial assistance of the ILO/WHO representative from Geneva, Dr Svere Fauska, the national committee was established. As a result of the first national seminar held in Warsaw in June 1993, and following selection based on readiness to participate in the project, seven companies had been chosen to carry out the campaigns. Over 20 other companies applied to the national committee to be included in educational seminars and were provided with written information materials related to the programme. Each organisation develops its own project to implement preventive measures in the area of alcohol / drug issues. Emphasis on including families in the campaign were maintained throughout the project. Supervision of the individual workplace was offered by a national programme manager and consultant on a regular basis through seminars, consultations upon requests and field rips. Upon commission of the National co-ordination committee, selection of posters, information leaflets and other advertising materials were presented at the seminar in June 1994 to the representatives of the participating companies. The accepted projects will be used in marketing campaigns in the companies. The idea of running the red light when clearly abusing a substance, the yellow light indicating the possibility of
danger; and the green light when no problems arise from moderate use of the substances has been agreed upon by all the participants of the programmes. A detailed plan for further steps has been adopted for each of the participating companies.

b. Prevention efforts by corporates including employee drug testing and the issues concerned with prevention.

Researchers at the American Health Consultants (1997) conclude that the best workplace programmes are comprehensive, include testing (when appropriate), early identification, and referral into assessment services such as Employee Assistance Programmes. These programmes give employees the option to use treatment benefits on demand, and a last-chance agreement, which gives an employee the option to seek treatment or to be dismissed. Though random drug testing is an effective tool for identifying problem employees, it is not effective for encouraging them to come forward for help. For drug testing to be effective, it needs to be part of a comprehensive programme so that employees understand that they will be treated fairly, offered help and education, and won't automatically be dismissed. Guidelines are provided for the following components of a comprehensive programme: education; testing; treatment through the employee benefits package; and clear policies supported by disciplinary action. Education and comprehensive benefits offer employers a tremendous untapped potential for savings—education can limit costs through prevention or early intervention, while extended follow-up care also will mean a much healthier bottom line. Communication materials, including brochures, videos, and optional or required orientation programmes, can help employees overcome any reluctance they have to talk to fellow employees about drug abuse. It is also critical to get these materials to family members. The real savings come from acting before drug abuse causes obvious problems in the workplace.
Angarola, (1990) discussing the responses of the corporate on substance abuse testing at the workplace comments that successful drug abuse programmes focus on improving the health and safety of employees and the public, increasing productivity, and keeping substance abusing employees on the job through counselling, rehabilitation, or treatment. All drug abuse prevention programmes that include drug testing should be comprehensive with documentation of the need for drug testing. Early discussions with unions or employee groups can assure compliance and employee support. A carefully planned and implemented substance abuse policy will help employers avoid both the problems of employee substance abuse and the employee dissatisfaction that results in legal action against the employer.

According to Curley, B. (1997) simple breath or urine tests that employ commonly accepted measurement standards are effective in letting employers discover immediately whether an employee is impaired on the job or was drunk at the time of an accident. Drug testing for such drugs as marijuana, cocaine, or heroin, however, only allow an employer to determine that the person has used a substance in the past few days. Hair testing allows an employer to determine if an employee has used a substance in the prior 90 days, but still does not address impairment. Since the methods that test for impairment are so limited, the ethical issue of how far companies should be allowed to go to promote safety and control costs comes into question.

The corporate alcoholism and substance abuse policies and procedures of the Westinghouse Corporation are discussed, with a focus on security observations and drug screening by Curtis (1989) The benefits of drug screening are supported by reports from the Pacific Gas and Electric (PGE) which experienced a 40 percent decline in the rate of serious injuries following institution of screening programmes. Therefore, Westinghouse, being committed to the health and safety of its employees and recognizing that drug and alcohol abuse are
widespread social problems, has instituted a programme that includes supervisor intervention, replacement assessment, and drug screening. The corporate procedure includes alcohol and other drug abuse and prescribes actions to deal with substance abusing employees, including employee assistance programmes. The goal of the programme is to detect evidence of substance abuse, determine prevalence, and deter employee misuse of controlled substances.

As part of a programme to develop accreditation guidelines for urine drug testing laboratories, a pilot study for proficiency testing was conducted by Davis et al (1991). Fifty civilian, commercial laboratories were included on a voluntary basis. Drug-free urine specimens were collected and either fortified with commonly abused drugs at concentrations comparable to casual use or submitted unfortified to participating laboratories as blanks. Samples were submitted on both an open and blind basis to the laboratories. Laboratory performance on open proficiency testing was comparable with that reported in existing proficiency testing programmes. Blind proficiency testing produced less accurate results in terms of apparent false-negatives, but significant difficulties were evident in carrying out blind testing and in comparing its results with those of open testing. Specific problems have been identified to guide future programmes.

Drug testing at work is rapidly becoming the standard in the corporate sector. For drug testing to fulfill its promise as a vital part of the effort to end the drug abuse epidemic, it is essential that the tests be reliable according to Du Pont (1990). Reliable tests will protect people who are not using drugs from being falsely accused and will ensure that legitimate medical use of controlled substances not expose employees to harassment or labeling as drug abusers. To merit employee confidence, workplace drug testing needs to be made a part of a programme that includes these basic elements: (1) a clear and comprehensive policy, (2) secure collection; (3) chain-of-custody procedures, (4) retained
positive samples, (5) an initial screening test, (6) a sophisticated confirmatory test, (7) a medical review officer, (8) a retest of retained positive samples in disputed cases, and (9) a system of quality control. In addition, this drug testing programme needs to be built on a solid foundation that distinguishes between legitimate use of prescribed medicines and non medical drug use.

Drug testing in private industry is discussed by Evans (1990). Headings within this article include: (1) privacy concerns; (2) employee assistance; (3) discrimination; (4) physicals; (5) jockeys; (6) supreme court; (7) chain of custody; (8) developing a testing policy; (9) implementing the policy; and (10) confidentiality procedures. It is concluded that drug testing can be used to protect employee health and safety but only so long as the rights of the employees are not violated. In the name of drug testing basic human rights should not be violated and the privacy of workers should not be invaded at any cost. The employer has no right discriminate against an employee who doesn’t accept the drug testing programme according to the author. All testing programmes should ensure accuracy, due process and confidentiality, and at the same time work for the rehabilitation of the drug or alcohol using employee the author concludes.

Only a few studies on workplaces have examined the Alcohol Use Disorders Identification Test (AUDIT) or carbohydrate-deficient transferring (CDT) as screening instruments for the early identification of elevated and risky levels of alcohol consumption. The purpose of this study by Flaunders (1995) was to compare the performances of AUDIT, CDT, and gamma-glutamyl transferase (GGT) in a routine health examination (alcohol screening) in the workplace. The study, carried out over 16 months in a large workplace in the transport sector, was part of an ongoing controlled study. Employees who came to the company health service for a routine health examination were offered the opportunity to undergo an alcohol screening and check their alcohol habits. Of the 570 subjects who participated, 105 (18.4 percent) screened positive according to AUDIT,
CDT, or both. Only 7.6 percent of the persons who screened positive did so according to both instruments. If GGT had been included as a screening instrument, the proportion of positive results would have increased to 22.0 percent. If the AUDIT only had been used in the screening process, the proportion of positives would have fallen by nearly half. The present findings suggest that AUDIT and CDT are complementary instruments for alcohol screening in a routine workplace health examination and each has value for identifying a different segment of the risky drinking population.

Jacobsen, J (1994) of the Eagle Insurance Co. prepared this Web site paper in 1994 as a response to "Frequently Asked Questions." This paper summarizes how and why a supervisor needs to address substance abuse problems in the workplace. Drug testing is specified as an early intervention tool. Key steps for developing a prevention programme are listed, including: Developing a written management policy about substance abuse Consulting with lawyers about the policy to ensure that it is within legal guidelines and (that is in accordance with employment and labour contracts Determining the screening/testing programme to be used, Providing substance abuse prevention education to employees, Providing training to supervisors and managers Establishing an EAP or other treatment plan, Receiving input from labour unions affected by the programme.

Hartwell, et al (1997) in a review article focus on the prevalence and characteristics of drug testing programmes in private-sector workplaces within the United States. Findings are presented from a national telephone survey conducted in 1993 which estimated the characteristics of testing programmes and described worksites most likely to implement them. Research findings are discussed in terms of social policy and earlier research results. Comments are offered regarding the future of drug and alcohol testing and its integration with other workplace substance abuse control strategies of alcohol and other drugs in the U.S. labour force by bringing together secondary data from several U.S. national surveys.
Approaches to prevention of alcohol abuse in the workplace are discussed by Lewis and Lewis (1986). The purpose of an employee assistance programme (EPA) is to provide timely, professional help for people whose work performance might otherwise be negatively affected by mental or physical health problems. Many employers have come to recognize that by offering such services to employees they can accomplish two purposes: increasing the productivity of their workforces and providing a benefit that employees value. Contemporary employee assistance programmes attempt to reach employees in early stages of problem development through two mechanisms. First, most EPA's are broad, meaning that they provide services for employees dealing with any kind of personal problem, whether or not it is related to chemical dependency. Second, programmes encourage self-referrals by employees as well as referrals from supervisors. In the future, it can be expected that employee assistance programmes will focus even more on prevention. Secondary prevention is directed toward the early identification and prompt treatment of mental or physical health problems. Services based in the workplace have proven themselves in terms of secondary prevention. The EPA does not provide help for an individual who has consistently lacked the skills or motivation to perform effectively. The focus of the EAP is on competent employees whose work has begun to deteriorate. If such employees are recognized early, through vigilant attention to behavior, they can be encouraged to use the services available to them. Employee assistance programmes can have even more impact if they place heavier emphasis on primary prevention. The focus of primary prevention is on lowering the incidence of dysfunction and promoting positive physical and mental health among members of the general population. The overall focus of educational interventions is to prevent the occurrence of dysfunction by improving the life competencies of participants. Counselors based in the workplace are in an excellent position to assess negative and positive environmental factors and to attempt change-oriented interventions. Employee assistance professionals in their role as consultants have a duty to do all they can to improve the quality of work life and thereby prevent the occurrence of health problems they see every day.
Morland (1993) discusses the different types of drug and alcohol testing programmes in the workplace and their implications thereof, the different types of testing discussed are 1. pre-employment testing 2. probable cause testing 3. periodic testing 4. Random testing 5. testing on return from treatment 6. Testing related to transfer or promotion 7. Voluntary testing. Five different goals are identified with regard to testing: 1) employees' health, 2) employees' safety at work, 3) job quality; 4) productivity; and 5) reduction of drug and alcohol use or misuse in society. All of these goals are important to society at large, the first four are main interests of employers and the first two are the most important to employees and unions.

Shain-M. (1987) focuses on the roles played by health promotion programmes in the prevention of alcohol and drug abuse are examined. A variety of health promotion activities, including educational seminars, physical fitness exercises, and skill-building can all impact on the prevention of excessive alcohol and drug use, resulting in a cost savings to companies due to reduced absenteeism, accidents, and injuries, and consequent increases in productivity. Emphasis should be on primary prevention and control of alcoholism.

The effectiveness of prevention efforts can be enhanced by Employee Assistance Programme (EAP) professionals claims Watkins (1997) in an article of a recommendatory nature. According to the author, these professionals can show that alcohol, tobacco, and other drug (ATOD) problems have become a major corporate focus. EAP professionals can help employers learn to be aware of the potential risks of use for businesses of every size, develop and implement a model of drug-free workplace policy; provide training to managers and supervisors on how to prevent ATOD problems in the workplace, and encourage employees to seek help through the EAP, provide information to employees about the connection between alcohol and other drugs and higher health care costs, teenage pregnancies, domestic violence, and other crime, and the spread of
sexually transmitted diseases; provide educational information about ATODs in the workplace; sponsor prevention programmes that benefit employees, their families, and the community; and host alcohol-free company events.

An article by Walsh et al (1990) discusses the issue of alcohol and drug/alcohol abuse in the workplace. The President of the United States signed an executive order calling for a drug-free workplace. A consensus has developed among business, labour, and industry that the workplace is an appropriate place to deal with individual substance abusers. The issue is how to implement substance abuse programmes in an effective way that is fair to the employee. The workplace programmes may be the Nation's best prospect of turning around the problem of drug abuse in this country. Within recent years, there has been an increase in the use of cocaine in the workplace. Industry has to deal with the problem of the corporate drug pusher, the individual who can supply drugs to the workforce on company time. Industry suffers losses through such things as theft, poor productivity, poor quality of work, and poor attitude and morale. Industry has tried to curb drug abuse by implementing drug/alcohol screening or substance abuse programmes. A drug abuse programme, first and foremost, must be established as a matter of policy. The programme should ensure the health, safety, and well-being of the worker in the workplace. The policy must not discriminate against anyone. There should be provisions for drug testing or screening and an adequate employee assistance programme should be implemented.

National Institute on Drug Abuse, Office of Workplace Initiatives has published a book compiling the papers presented at the Bethesda conference on substance abuse at the workplace. This book edited by Walsh and Gust (1986) is a result of bringing representatives of business together to develop (1) a consensus on the need to address drugs in the workplace and (2) to recommend procedures for establishing a fair and sound drug programme. The use of drug testing and screening procedures has raised issues of legality and ethical values. The book is
the outcome of a conference with speakers who addressed issues before making a uniform drug policy and establishing enforcement procedures. The issue areas are legal, ethical, medical, technical, safety, security, labour, employee relations, employee assistance, and employee benefits. These papers were presented during workshops. The first group was "legal and technical considerations," which called for well designed, controlled, and proficient programmes of testing that would stand legal challenge. Human relation concerns were addressed, including the arbitration of individuals and labour management as they interact, and employee assistance programmes as they now exist. The experiences of successful programmes of several large corporate employers from major sectors of industry were described. These papers provide background. This conference marked the first major federally funded meeting of private sector interests to discuss the problem of drug abuse.

Concern about employee alcohol abuse has prompted a number of corporate responses including drug testing and the expansion of employee assistance programmes. However, the next step needed is the development of workplace prevention programmes claims Vicary, (1990) His article in the Employee assistance Quarterly discusses basic prevention methods and appropriate audiences, relating these to possible company and union activities. By building on existing human resources/personnel department programmes or corporate-sponsored community services, for example, employees, their families, and the community at large can benefit. Workplace educational programmes, professional development workshops, recreational activities and involvement in local schools all contribute to the prevention of the corporate costs and consequences of alcohol abuse.

In 1999, the Harvard School of Public Health College Alcohol Study surveyed 734 U.S. college presidents and administrators to learn what colleges were doing to prevent binge drinking among students. Respondents were asked to rate the severity of alcohol abuse problems among students and specify prevention
programmes used to address this problem. An eight-page questionnaire was developed to elicit information about the types of alcohol education and prevention programmes offered to students and about the enforcement of alcohol-control policies. The study found that prevention practices were widespread regarding general education about alcohol, use of policy controls to limit access to alcohol, restricting alcohol advertising at home-game sporting events, and creating alcohol-free dormitories. Programming was less prevalent for specific alcohol education, outreach, and restrictions on alcohol advertising in campus media. Most of the college administrators reported that their schools designated a campus alcohol specialist. However, it was observed that institutional investments that required greater specificity of function (e.g., in-house programme evaluation), more personnel (e.g., a task force), and more community involvement (e.g., cooperative agreements and community meetings) were less common, and cooperative agreements were rare. Many colleges reported having task forces, and about half were performing in-house data collection. Prevention practices varied with institutional characteristics and the surveyed administrators’ perceptions of the severity of the alcohol problems among students. (Wechsler et al 2000).

c. Legal issues regarding policies and intervention:
Crow et al (1992) in an innovative decision-making research in labour arbitration using alcohol and drug disciplinary cases investigated the decision cues relied upon by labour arbitrators in alcohol and drug related cases. Using arbitrator Carroll Daugherty’s seven tests for determining just cause as a framework, 249 published arbitration awards related to drug and alcohol disciplinary cases were analysed through logistic regression. In terms of dominance, tests were found to be especially significant. The company’s ability to prove misconduct, the reasonableness of the company’s action, and the appropriateness of the penalty, of the 249 cases examined, none of the criteria relied on by arbitrator in making awards were outside the just cause framework as defined by Daugherty’s seven tests. Proof of misconduct was cited in 97% of
the cases, the appropriateness of the penalty in 45% the reasonableness of management's action in 44.2% proper notice in 32%, equal treatment in 28%. Proper investigation in 23.3% and fair investigation in just 2%.

Discussing the implications of the ADA act (Americans with disabilities act) Crow (1991) (focuses on the initial stand taken by the employers towards chemically dependent employees, which is a totally negative and a punitive approach. Attributing credit to the act for classifying alcohol/drug dependency as a "disability" and extending protection to them is according to him a step in the right direction, for he feels that chemically dependent workers have always had to face the worst, the employers scarcely treating their pathological conditions as impairment, although research abounds with evidence that chemical dependency is a specific form of mental impairment. However, the author is rather apprehensive about the reaction of industrial employers towards the act, and suggests a total re-orientation of attitude and reconsideration and modification of their policies to suit the provisions of the act and treat the chemical dependency of their employees as a disability and provide for its treatment.

Goff, J.L. (1993) in an article entitled Corporate responsibilities to the addicted employee take a look at practical, legal, and ethical issues. Concerned with the issue. Practical, legal, and ethical issues associated with corporate responsibilities toward addicted employees are discussed with reference to historical attitudes toward alcoholism and drug addiction among employees. As a practical matter, taking care of addicted employees makes good economic sense, and the results of studies on the cost effectiveness of employee assistance plans are considered encouraging. But the effects of employee assistance plans on health insurance costs or of the provision of addiction treatment as part of a company's health insurance benefits plan are hard to assess. Legal aspects of the Rehabilitation Act of 1973, which prohibits discrimination against handicapped persons in employment practices, and the applicability of this act to addicted
employees are also discussed. The negative consequences of ignoring the problems of addicted employees are also discussed, including inferior product quality, lawsuits resulting from employee negligence, poor company image, difficulties with collective bargaining units, poor customer relations, and increased operational costs to lost time, absenteeism, health care, and workers' compensation claims.

The implications of the impact of National Drug control strategy in eliminating workplace drug and alcohol problems is discussed by Harrisson (1990). The National Drug Control Strategy provides a unified, integrated national policy aimed at the problems posed by illegal drugs and includes a clear mandate to focus on drug-free workplace programmes with a role for both the private and public sectors of the Nation. Strategy II provides an expanded and refined description of the directives originally set forth in the National Drug Control Strategy. Strategy II reaffirms that, in the workplace, Federal agencies are progressing toward full implementation of drug-free workplace programmes. It also reaffirms that in the private sector, the administration will continue to support and encourage efforts to rid the workplace of drugs, giving special attention to businesses and service industries. The National Institute on Drug Abuse will continue its various programmes to assist businesses in developing effective drug-free workplace programmes.

Discussing the implications of the Drug-free workplace Act, Schecter (1991) comments that the passage of the Drug-Free Workplace Act of 1988 has brought new realizations to American business about the problems of alcohol and other drugs on the job. Companies and their employers are now recognizing that their employees have a 25 percent chance of being a regular drug or alcohol user. The Drug-Free Workplace Act of 1988 outlines five key components that employers should have in their drug-free workplace plan: (1) a comprehensive written policy, (2) supervisory training, (3) employee education/awareness, (4) availability of an employee assistance programme (EAP), and (5) identification
of illegal drug users, including drug testing on controlled and carefully monitored basis. The link between the prevention of substance abuse and overall employee wellness has been identified by many companies, both large and small, over the last decade. These companies have discovered a close connection between the physical and emotional health of employees and the overall health of the organization. Isolated efforts by several companies to reduce health insurance costs, workers' health claims, absenteeism, and accidents have evolved into a desire to increase productivity and profits by expanding employee awareness and services regarding issues that are potential health risks. Comprehensive workplace wellness programmes offer a variety of services including: health promotion activities, screenings and appraisals, sports and leisure programmes, healthy lifestyle courses, and environmental strategies such as removing cigarette and candy vending machines and instituting no smoking policies. Health promotion goals include promoting the physical and emotional health of employees and their families, resolving disturbances in the physical and emotional health of employees at the earliest stage of problem development, and preventing the return of physical and emotional health problems once the employee has been treated.

Segal (1996) reviewing the implications of the ADA act with reference to workplace drug related issues emphasizes that employers should provide drug-dependent employees with an opportunity to pursue rehabilitation as an alternative to discharge. Although the ADA's definition of a disabled person excludes an individual currently using an illegal drug, the exclusion does not apply to individuals previously dependent on alcohol or drugs or dependent on legally prescribed medication. Moreover, rehabilitation is supported by unions, costs less than worker replacement, and is an important part of health and safety employee's relation's issues. However, rehabilitation opportunities should not be unlimited. Workers should only be given this opportunity if they have admitted to substance abuse, companies should reserve the right to approve
treatment programmers, and workers should provide a certification of fitness for duty, before recommencing active employment, and be required to continue with the treatment plan.

Simon (1990) probing into the legal question of whether an employee can be fired for one positive drug test provides an interesting case-study. An employee at the Kroger Company plant in Indianapolis was observed acting agitated and having glassy eyes. A drug test was conducted at Community Hospital and 3 hours later a second drug test was conducted at Metpath. Before the test results came back the employee checked himself into the St. Vincent Hospital Stress Center were he received treatment for alcohol dependence under the company benefit plan. He was fired on release for a positive alcohol result from the first drug test since company policy prohibited the possession of drugs or alcohol on company property. This case was taken to arbitration because the second test came back negative. The arbitrator told the company to give the employee one last chance since to sustain the discharge the company had to prove that the use of drugs affected the employee’s work performance. The arbitrator said there would be no back pay for the employee, however, and that the company had the right to test him up to six times over the next 6 months. If the employee tested positive in any of the tests, regardless of work performance, the company had the right to fire him.

d. Intervention strategies including the importance development and role of employee assistance programmes:

Appelgate et al (1988) discuss Employee assistance programmes (EAPs) and a Skill Development Model for use with EAPs. According to the authors EAPs affect individuals and entire organizations. By learning and teaching a re-thinking process, members of EAPs are able to achieve a higher recovery rate when working with substance abuse and emotional disorders. EAPs in southern California, using the Skill Development Model have achieved a recovery rate of
over 85 percent. The process initially trains EAP professionals to become Master Teachers, who then assist in the training process for a larger group, the Certified Resources. The larger group, which may comprise 10 percent of the workforce, then assists in presenting Skill Development to the entire workforce. The emphasis is on using the skills on the floor in the every-day processes of working together and the final step may take 4 to 6 months to complete. The presentation to the entire workforce in a 2-day workshop is the beginning of a cultural change that will take place over the following year, as the role modeling, coaching, and teaching by the Master Teachers and resource staff become effective in defining the choices people can make, in rethinking strategies that can change out of control to in control and negative stress to opportunity.

The history and development of industrial alcoholism programmes in the US are discussed by Beaven-W.H. (1989). The four basic principles guiding these programmes are listed, and it is noted that the key individual in programme success is always the immediate supervisor. The point is made that while alcoholism treatment programmes have accomplished great good in industry, they have done little or nothing to attack the basic problem which lies in increasing consumption of alcoholic beverages by the general population. Recommendations are offered to diminish the detrimental effects of alcohol consumption on society at large.

The benefits of a workplace alcohol intervention cannot be realized without managers adequately identifying and referring impaired employees. A research article by Bell, N.S (1996) et examines managers' perceived barriers to intervention for alcohol abuse and evaluates the impact of these perceived barriers on the interventions themselves. Data were collected by means of a survey from 7,255 supervisors at 114 worksites. There was a 79 percent response rate, with barriers reported by most respondents. Three categories of barriers were identified by cluster analysis: organizational, interpersonal, and individual.
The degree of barrier reported was related to specific job and environmental factors; female managers, managers in larger worksites, and first-line supervisors reported greater barriers. There were also more barriers perceived in initiating formal interventions as opposed to informal ones. The authors conclude that managers face significant obstacles in effectively handling substance abuse problems in the workplace, and that the most pervasive obstacles are those related to individuals' skills, and attitudes, and the perceptions of the managers. The article thus presents a strong argument for the focused training of managers at the job level, rather than a general corporate level programme. Without such training, Employee Assistance Programmes will be underutilized, and problems in the workplace will persist.

The organization, methods, and effectiveness of employee assistance programmes (EAPs) are discussed by Brooks.B (1987). While early EAPs emphasized the late stages of the disease of alcoholism, many of those in place today consider other health and behavioral problems, family members, and deteriorating job performance. By 1980, approximately 10 million employees were covered by EAPs. A clearly written policy for all EAPs should be required. Once the policies have been developed, case-handling procedures should be established. Most companies will insist that involvement in the EAP be kept separate from personnel records and that participation in an EAP should not affect promotions or raises. However, participation in an EAP should not protect an employee from disciplinary action if job performance is unsatisfactory. Recovery rates for EAPs have gone as high as 60 to 80 percent; savings on sick pay have reached as much as $2 million a year. For many employees, an EAP may be the last hope for recovery concludes the author.

Besenhofer, R.K.; Gerstein, L.H. (1991) conducted a study based on Bayer and Gerstein's (1988a) Bystander Equity Model of Supervisory Helping Behavior, this study examined the relationship between characteristics of EAPs, managers, workers, and the EAP referral process. In general, it was hypothesized that
managerial status, the type of employee substance abuse, and the location of an EAP would affect hypothetical supervisors' referrals. Graduate level business students (N = 222) were asked to imagine themselves as supervisors (upper, middle, or front-line) of persons employed by a fictitious manufacturing firm. Each received one of three sets of employee scenarios (cocaine abuser, alcohol abuser, or job-impairment only). Additionally, half of the participants were told that their EAP was company-based, while the other half were told that their EAP was community-based. Respondents were asked to indicate their likelihood (0-100 percent) of referring a particular worker to their EAP. As expected, ANOVA results revealed two main effects for type of substance abuse and managerial level. Participants were more likely to refer cocaine abusers than alcohol or non-substance abusing hypothetical employees. Referral rates were also higher for alcohol abusers as compared to non-substance users. Finally, it was discovered that hypothetical front-line managers were more inclined to make referrals as contrasted with upper-level managers. No effect was discovered for the manipulation of the EAP's location. A number of theoretical explanations for these results were offered, as were limitations of the current study and implications for future research.

Components of a needs assessment for an employee assistance programme (EAP) are described by Blazer, and Pargament (1988). It is suggested that an EAP needs assessment is necessary, not only from the financial perspective but also from the perspective of providing properly integrated counselling services to employees and their families. The needs assessment will provide useful, systematically collected information for choosing the most appropriate EAP services and delivery systems to meet particular employee needs. The components of the needs assessment might include: company sources (employees, supervisors, union representatives, management), community sources (mental health, financial, legal, and drug rehabilitation counselors), direct and indirect sources (surveys, interviews, personnel and organizational records). These components should address both employee and company
concerns (mental health, drug and alcohol dependence, personal problems, job satisfaction and performance). It is suggested that the savings resulting from a well-designed EAP will offset expenses incurred by the needs assessment.

The development of employee assistance programmes (EAPs) as a new occupation is described by Blum (1988). The employee assistance specialty has recruited individuals from existing occupations and is in the certification process. The certification boundaries assure that those with clinical training must have competency in alcohol and drugs, an area often omitted or poorly covered in many clinical training programmes. However, technical developments in the workplace have produced more rationalized and bureaucratic alcohol interventions, and the relationship of EAPs and treatment agencies has been influenced by the availability of third party insurance payments and treatment facilities appropriate for employed individuals. With the innovation of job performance deterioration as an indicator of personal troubles came a necessity for careful policy formulation in EAP implementation and the need to broaden the focus to include problems other than alcoholism. The standards for the development of new programmes cover policies and procedures, administrative functions, education and training, resources, and evaluation. It is suggested that with so many practitioners whose experience can determine the training necessities, the occupation is ready to make its claims.

An Assessment of Employee Assistance and Workplace Counselling Programmes in British Organisation" has been published as a Contract Research Report by the Health and Safety Executive (HSE). It followed a three year HSE funded research project by Carolyn Highley- Marchington and Cary Cooper(1998) from Manchester School of Management, University of Manchester Institute of Science and Technology. Their key findings included:

(a) Employment Assistance Programmes (EAPs) were often purchased for public relations reasons to try to demonstrate employers cared for employees, to help employees adapt to change and to respond to high levels of stress within the organisation. Most workplace counselling programmes and EAPs tended to
concentrate on individuals with personal, rather than work-related problems. (b) After counselling there was a significant drop in sickness absence in those counseled, but no effects on job satisfaction or sources of pressure, and no effects on those not using the service. (c) Most EAP providers did not give counselors information about client companies as a matter of course, but only if this was felt necessary for some cogent reason. It was found that the majority of companies (70%) had not carried out any analysis or audit to try to ascertain the precise needs of the company/employees before introducing an EAP. Likewise the services in practice had not been audited or evaluated in any systematic and independent way. In order to be really effective counselling at work must address workplace as well as personal issues. At the time that the research was carried out they were not doing that conclude the authors.

Dawson-M. Company (1980) describing the Victorian Foundation's efforts to establish occupational alcoholism programmes in industry to assist employees with problems outlines the development of eight specific stages of programme implementation supported by actual case studies, and is based on the accepted assumption that the criteria for assisting alcoholic employees is through identification of poor work performance, supported by constructive confrontation and the offer of help by the employer. This concept has been accepted in both Australia and the United States as the only effective way of detecting alcoholic employees and motivating them to accept treatment for their problem. It has been found that most successful programmes rely heavily on a competent in-house individual capable of identifying, diagnosing, confronting, motivating, and referring employees with alcohol problems to the appropriate treatment facility. It has also been found that programmes which do not have a key person such as this need an alternative strategy to make their programmes effective. These findings led to the development of a systematic programme which relies on organizational and existing skills of supervisors and managers to achieve the desired results. This model consists of eight stages: (1) initial
discussions; (2) policy; (3) management and union commitment to policy and programmes; (4) coordination; (5) diagnostic counselling; (6) training; (7) employee education; and (8) evaluation. Each of these stages is outlined and followed by case studies to highlight the successes and problems, and to demonstrate that each stage is necessary.

Criteria are provided for evaluation of the following aspects of employee assistance programmes (EAPs): in a primer on EAPS by Dixon (1988) policy development, employee orientation, supervisor training, availability during non business hours, assessment and diagnostic services, crisis counselling, referral, quality assurance, programme evaluation, and cost. Many larger corporations as well as smaller companies now sponsor or contract with groups of mental health professionals to provide EAPs. These programmes deal with psychiatric disorders, alcohol and drug addiction, and stress-related problems. Factors that have influenced the increasing demand for EAPs include corporations' concern for employees with mental health problems, a desire to contain rising health costs and reduce corporate losses, and the need for effective supervisory systems for managing troubled employees. Most programmes are broad-based covering services that may be less clinical and more preventive, including health risk appraisal diet and nutritional counselling, stress reduction training, bio feedback, exercise instruction, and parenting.

Three conceptual approaches currently employed by industrial alcoholism programmes are described by Dawson (1998) in a paper presented at an awareness conference on Alcoholism in industry and commerce. The first approach is a system which requires identification of alcoholics, or a suspicion that alcoholism is the problem, as a basis for supervisory action and initiation of referrals. The second approach is a system which gives verbal recognition to the necessity of basing referrals on unsatisfactory job performance, but instructs supervisors to initiate referral procedures only when they "suspect" that the unsatisfactory performance is due to alcoholism. The third approach is a system
which focuses exclusively on monitoring job performance. Under this system, all employees whose performance drops and remains below acceptable standards are referred to professional counselling and diagnostic services for identification of the employee's problem, followed by appropriate treatment. It is noted that the most effective company programmes are those that have adopted a formal policy on alcoholism. The basic principles of alcohol policies are listed. They are (1) effective system of detection and screening (2) preventive counselling (3) programmes for families (4) periodical health-surveys (5) a system of referrals to community treatment centers (6) post-treatment counselling and (7) proper follow-up and encouragement to join self-help networks. The role played by trade-unions in motivating employees to seek help for drinking problems is emphasized.

Ferman-L-A. (1994) commenting on the quality of work life programmes and EAPs states that coincidental with the growth of employee assistance programmes (EAPs) has been the development of industrially based programmes to reorganized the workplace to improve communications across different levels of organization, to develop mechanisms to solicit inputs for problem-solving from all levels and groups in the organization, and to distribute decision-making power across a spectrum of the organization. These quality of work life programmes (QWLs) assume that involvement and participation of employees in the operation of the plant results both in a more humane and efficient organization of work. The factors that act as barriers to EAP involvement and participation with work reorganization efforts and how EAPs and QWL programmes can be reconciled are discussed. EAP and QWL programmes are different with respect to goals, technology, staffing patterns, and emphasis on expertise. QWL programmes, however, do offer new opportunities to advance concerns with impaired employee problems.
Ways to maximize employee assistance programmes (EAPs) are described by Fisher (1990). The author suggests that EAP professionals can use a number of techniques, including attitude, presentation, education, and establishment of a task force to help enlist the cooperation of top management. Medical professionals within the organization play key roles in EAP use by being alert to signs of chemical abuse and giving appropriate referrals. Union officials can also play a role in employee use of EAPs. It is concluded that EAP professionals can establish effective programmes and can create a referral cycle that will maximize EAP use.

The evolution of employee assistance programmes (EAPs) is reviewed in terms of conceptualization, rationale, and marketing by Googins, B. (1990). The core technology of EAPs (P. Roman and T. Blum, 1988) describes the elements that appear to be primarily preventive in nature: identification of problems based on job performance, consultation and advice to supervisors and union stewards, and the strategy of constructive confrontation. By using the documented record of job impairment, through a job-focused intervention strategy, it is possible to move the employee into treatment long before the problem expands to more serious stages. The reported rates of EAP treatment success of from 60 to 70 percent, compared to the 30 percent success rates reported in community treatment, corroborate the reputed power of the EAP. However, over the past several years, a growing dissonance has begun to appear between the model and the practice of EAPs. Although the EAP is still able to deal with alcoholics who have not hit bottom by reason of their being employed, there is sufficient evidence to question the ability of the EAP to capitalize on the early intervention and prevention potential that has historically and conceptually underlain the very essence of the EAP.
Tracing the evolution of employee assistance programmes (EAPs) and discussing the benefit plans, and cost-containment strategies Lee (1988) suggests that the battle lines are forming between individualized treatment plans and cookie-cutter" approaches to rehabilitation. The firms that can offer high quality managed mental health programmes that include all available services will be in high demand by employers. EAP firms are forming relationships with case management firms. The problems that arise when case management and EAP firms are combined are numerated: order of responsibility, reporting, referrals, expertise, continuity, evaluation, and costs. It is suggested that as managed care environments develop, EAP practitioners will move to the more comprehensive programmes and the number of free-standing EAPs will be limited.

The role of the employer in alcoholism treatment is discussed in an article by Bernstein and Mahoney (1990). Headings within this article include: (1) direct and indirect costs of illness and injury; (2) from occupational alcoholism programmes to employee assistance programmes (EAPs); (3) employee assistance programmes, including expansion of benefit plans; (4) the health care cost crisis; (5) costs of alcoholism; (6) employer responses; (7) managed mental health care; (8) proposed approach; (9) occupational medicine and the cost of care; and (10) the alcoholic employee. It is concluded that in those organizations where management is sensitive to alcoholism and alcoholism treatment, the prognosis for those employees suffering from this disease is good. It is stressed that a greater variety of services should be available, particularly intensive outpatient treatment. Treatment of the working alcoholic is beneficial for the employee who receives effective individualized treatment and for the employer who regains the full productivity of the employee.

Mogorosi, L.D.(1998) in his thesis on Employee assistance at the workplace- The South African experiences and model has examined South African employee assistance programmes (EAPs). Most of the respondents were local
South African organizations. Approximately three quarters of the programmes that responded had been in operation less than 10 years. EAP staff were equally divided by gender and the majority were social workers. Programme sponsorship was overwhelmingly internal and most programmes were part of Human Resources Departments. Approximately three quarters of the programmes were modeled on EAP with broad-services orientation. Most of the clients do not pay for the programme's services. Evaluations were done internally with about one third using a formal performance and one third using process evaluation. Few programmes did surveys for client service satisfaction or programme cost-effectiveness. Half of respondents stated that absenteeism results in pay loss and another 40 percent refer absentees for counselling. Few organizations suspend or terminate employees as a first response to absenteeism. Four of every five responding organizations indicated that employees with drinking problems are referred initially to counselling or treatment.

Mollick-L-R.(1993) Corporation needs a psychologist Justification is provided for corporations that retain psychologists as mental health counselors, and examples are given the illustrate their effectiveness in the work environment. Corporate psychologists are useful in dealing with alcohol and other drug abuse, emotional distress, smoking, time management, and communication. Suggestions are given concerning ways in which the corporate psychologist might be helpful in each of these situations.

The origins of contemporary workplace programmes providing assistance to employees with alcohol-related problems are described by Roman (1988). First, the emergence of employee alcoholism programmes and major changes in definitions and formal reactions to alcohol problems are considered. Nearly all intervention strategies follow the broad outlines of the employee assistance programme (EAP) design: basic programmes based within a work organization and staffed by an organization employee; external-programme models
characterized by the presence of a formal contract with an external agency; programmes based in a labour organization; and programmes for members of a profession. The success of these programmes is described with findings from a survey of 480 private company sites. Increasing rates of self-referral for assistance with alcohol problems are noted, indicating that self-referral is a major component of workplace intervention programmes.

Rest-K-M (1989) analyses the relationship between alcohol and working American industry. Job-based alcoholism programmes evolved from the performance-oriented managerial ideologies that developed over the past century. American industry has vacillated between or operated with a combination of two basic themes: (1) the theme of unremitting and impersonal control of employees to ensure the highest levels of performance; and (2) a humanitarian and compassionate theme that views performance as a function of employees' satisfaction with their work, workplace, supervisors, and coworkers. The effectiveness of employee assistance programmes (EAPs) is examined. It is suggested that EAPs begin to look at the reciprocal relationship between alcoholism and other stress-related problems and the workplace and begin to take some action.

Purveyor organizations, which market employee assistance programmes (EAPs) to others are discussed by Roman and Blum (1988), with a focus on the ways they influence the implementation of EAPs. The study group included 724 occupational programme consultants from purveyor organizations who responded to a survey addressing various components of EAPs. The study results supported the hypothesis that the greater the purveyor's integration of and control over its sub unit for EAP service delivery, the more relationships the purveyor will have with treatment organizations and the higher its level of sociopolitical acceptability, the more successful it will be in implementing EAPs. It is suggested that organizations implementing EAPs should integrate
EAP subunits with other company functions and should take into consideration networks with other community resources. Equally important is development of managerial strategies to guide and control the EAP service delivery units.

Roman and Blum (1989) provide an overview of employee assistance programme (EAP) efforts, presents research data on aspects of programme operation in relation to employee alcohol problems, and outline some of the problems of and prospects for EAPs in dealing with alcohol problems in the work force. They present data on the emergence and growth of EAPs, concluding that the diffusion of EAPs in American workplaces has been extensive and rapid. Data on referrals and programme use for alcohol-related problems indicate that programmes could be improved to identify alcohol problems at an early stage. However, 45 percent of the employees with alcohol problems referred for the first time are referred to a 28-day inpatient programme and an additional 9 percent to inpatient programmes of fewer than 28 days, a combined total of more than half the alcohol problem caseload. Issues for future consideration by EAPs include balance within EAPs on direct counselling services and integration into workplace management, balanced emphasis on alcohol problems and other problems, and balance of increasing demands to help employees with a range of emergent problems. The authors provide alternative approaches including alcohol education in the workplace, alcohol control policies associated with work, and wellness programmes. In conclusion, the authors state that EAPs make substantial contributions to dealing with America's alcohol problems and do so in a context of voluntary action without public subsidy. Further research into the enhancement of their effectiveness and maintenance of emphasis on alcohol problems is needed.

The use of cultural referral categories in studies of alcohol treatment programmes is discussed in this review of the medical and psychiatric literature by Sonnenstuhl et al. Headings within this article include: (1) conflicting ideologies and referral categories: a historical context; (2) supervisory referral:
the job performance model; (3) peer referral: union reaction to the job performance model; (4) self-referral: counselors' reactions to job performance; (5) the ballooning of the self-referral label and its social consequences; (6) the use of cultural categories in employee assistance programme (EAP) outcome studies; and (7) constructing a grounded theory of seeking help from an EAP. It is concluded that when clients are admitted to an EAP, they should be asked about all other interventions they have experienced, which may help determine those methods that work best in a given work environment. In addition, knowledge of those interventions that have been effective might be useful in determining what motivates employees to seek help and in designing therapy strategies that take advantage of previous client experiences.

Shain-M. (1992) has tried to explore the ability of broad-based EAPS to generate alcohol-related referrals. The merits of broad-based employee assistance programmes (EAPs) were studied over a two-year period by collecting data from ten broad-based programmes including: annual identification rates (for alcohol and all causes); percentage of formal/informal referrals; location of services; auspices; services beyond assessment, referral, and direct counselling; provision for direct access by employee; and type of work done by client organizations. Six hypotheses were tested: (1) broad-based programmes will exceed the mean identification rate of narrower programmes with regard to alcohol-related cases; (2) a variety of pathways to care will attract more alcohol-related cases; (3) more employees will use a service which is external to the workplace; (4) employees are more likely to utilize a service developed and implemented jointly by management and union or other employee representative groups; (5) employees will utilize services more often when training and education is used to inform supervisors and employees about the programme; and (6) the greater the number of these principles that are served, the greater the identification rate of alcohol-related cases. The findings included: broad-based EAPs performed as well as narrower programmes in average
identification rates; variety of pathways to assistance was of greater importance for non-alcohol related problems; in-house programmes were as effective as third-party services; union involvement appeared to be a determinant of referral rates; referral rates tended to be higher where education/training programmes were utilized; and the programmes did not show any consistent trend. Recommendations for further research are made.

Simerson-G-R; Brannas-V-A; Pizzuti-A; Inskeep-R.(1991) contend that salaried employees with alcohol misuse problems are often overlooked or ignored because of misconceptions that such competent, productive people could not have a drinking problem. The result is often late recognition and a damaged career, a broken family, or even an early death. Available statistics testify that the percentages of people with alcohol problems are comparable across the socioeconomic spectrum. This evidence prompted the development of a variety of industry-based programmes to assist employees with alcohol and other problems in regaining productive lives. Employee assistance programmes (EAPs) have been more effective servicing hourly and bargaining unit employees; traditional EAPs are not adequately reaching the difficult to document salaried employee.

Shetty's (1993) doctoral dissertation focuses mainly on factors that help or impede in the identification, treatment and rehabilitation of the alcoholic in an industrial setting. Besides, the study also attempts to examine the perception of employers at different levels about alcoholism and its other related aspects and to identify factors critical to the development of a programme on alcoholism in the industrial context. An industrial organization known for its efforts to combat alcohol and believed to have a multi-dimensional alcoholism programme was selected. The researcher studied the alcoholism programme from the perspective of a range of key persons, viz, counsellors, supervisors, Union personnel, senior management personnel, medical personnel etc who play a key role in the process
as well as the beneficiaries of the programme. The views of the rank and file of employees towards alcoholism and their concept of needed intervention was also studied. Findings reveal that adequate efforts have gone into the education of the employees to develop a vigilant but compassionate view of alcohol and thereby the alcoholic. Some of the factors facilitating the recovery of the alcoholic were identified as follows: i) Identification of the alcoholic—through proper detection techniques was the first pre-requisite for intervention, which the organization handled effectively. ii) Organization’s resources: the organization had trained counselors, sensitized supervisors, union personnel, medical personnel, psychiatrist, rehabilitation center and a company-based AA and well-equipped medical center all of which jointly contribute to the recovery of the alcoholic. iii) Special strategies—the team approach, with the union representative as a strong member of the team, crisis precipitation, constructive confrontation, family involvement, etc. are some of the powerful strategies used effectively by the organization. iv) After-care and follow-up services: the counselors maintain follow-up meetings with the alcoholics and educate the spouse of all relevant aspects of alcoholism. Anticipatory guidance is given to the alcoholic and his family and this helps in the process of recovery. Impediments in the recovery of the alcoholic were identified as: 1. Lack of awareness about alcohol. 2. Non-referral, delayed /incorrect referral. 3. Under-utilization of company-based AA groups. 4. Strong denial of the alcoholic. 5. Dropping out of treatment at different stages. On the whole, the researcher found that the organization had used its potential to intervene with the alcoholic employees and rehabilitate them to a considerable extent.

Tissone-C; Hellan-(1983) reviewing the types and functions of states that Employee assistance programmes (EAPs), whether in-house or out-of-house, are categorized into four basic models: (1) lay assessment/referral; (2) professional assessment/referral; (3) closed-end full service systems; and (4) open-end assessment/treatment services. The lay assessment/referral method was the programme standard in the EAP field for several decades. This model is
generally characterized by a focus on declining work performance. The troubled employee is given a clear alternative between accepting assistance or receiving disciplinary action. The employee who accepts assistance usually visits the lay counselor in an office on company premises. As long as the individual follows through with the treatment recommended by the lay counselor, disciplinary action is withheld. As the disease of alcoholism gradually gained recognition in professional communities, an increasing number of companies sought professional diagnostic services, either in house or outside, to make a clinical assessment of an individual's personal problems before making referrals to treatment. The professional assessment/referral model opened new career opportunities for those in the fields of psychiatry, clinical and counselling psychology, and social work. The closed-end full service EAP system was an attempt at early identification of problems and problem resolution in a cost-effective manner prior to costly treatment. Because short-term professional counselling is involved in this model, most firms have utilized outside contractual services which are more inexpensive, since overhead costs are shared by several companies. The open-ended model is attractive to many employers because of relatively low front-end cost. This model begins with the provision of assessment and counselling services on a fixed fee basis. Treatment or ongoing counselling is then provided by either the same practitioner or a different department of the same organization on a fee for service basis. This model offers the advantage of proximity, if not diversity, of treatment. The best model (of these four) for any given company depends on the company's structure, goals, management style, cost considerations, and general employee makeup.

The employee assistance programme of the Washington Metropolitan Area Transit Authority (WMATA) is discussed, with an emphasis on problems of substance abuse. (Thorne 1990) Following union negotiations and extensive review of alcohol and drug abuse problems, WMATA implemented an employee assistance programme (EAP). The programme provides for employees who volunteer for its services and for employees who test positive for drugs or
alcohol following an incident or accident on the system. Employees in rehabilitation for alcohol abuse remain 30 days minimum in the programme; marijuana abuse, 90 days minimum; and cocaine, PCP, heroin and other drug abuse, 180 days minimum. It is concluded that the programme is currently effective, due to well-planned and executed procedures. Cooperation between management and labour is crucial to the success of such a programme, if it is to address company concerns while safeguarding employee rights.

Although the occupational alcoholism programme model implies a direct relationship between participation in treatment and improved job performance, little research exists that substantiates the efficacy of the model. Seven variables which are systematically documented in every employee's personnel record were analyzed by Howard, W.C. (1990), for 35 alcoholism programme clients and a comparison group of 58 non-problem employees at a large public utility in the northeastern United States. The criteria of short-term absence, long-term absence, written warnings, suspensions, tardiness, medical clinic visits and on-the-job accidents acted as the operationalized definition of the dependent variable job performance. This study found significant expected improvements of the alcoholic group at the point of 1-year follow-up. Most observed improvements, however, were not sustained by the third year following intervention. More refined performance and outcome measures are recommended, as well as attention to programme implementation evaluation.

Trice, H.M. et al (1988) discuss the inception and development of the employee assistance programme (EAP). According to the authors it was begun to motivate workers with alcohol problems to improve performance rather than risk losing their jobs. EAPs have progressed from being informal arrangements between physicians and members of Alcoholics Anonymous (AA) to being considered an integral element in identifying and treating alcoholics. Some EAPs are sponsored by unions; others, by management. Joint EAPs, in which unions and
management work together, are considered better than either of the preceding two types for several reasons: (1) Joint efforts are believed to be more effective in motivating workers' acceptance; (2) union representatives are perceived as more sensitive than management to alcohol abuse and other employee problems; (3) joint committee activities increase EAP visibility; and (4) informal communications between management and unions enable more flexibility and better cost and procedure monitoring.

Warren, Gorham and Lamont (1997) discussing the response an employer should adopt once an employee tests positive suggest that An employer needs to have a clear policy in place for the first time an employee tests positive on a drug test. The action taken is determined partially by whether the employee is covered by Department of Transportation (DOT) regulations. The DOT has a clearly indicated procedure, including the kind of testing that is done, the use of a Medical Review Officer (MRO), and the requirement that anyone who tests positive be removed from any safety sensitive position until they are cleared to return to work. Even companies not covered by the DOT testing rules should follow some of DOT's basic guidelines, including the use of certified laboratories and MROs who interpret the test results, ensuring proper testing. After employees are told they tested positive by the safety manager or human resources manager, they should be sent to a professional for an assessment to determine if they are using drugs occasionally or if they are chemically dependent or addicted. Addicted workers need treatment. A programme called Positively Negative is for recreational users; it helps prevent further positive drug tests by changing the workers' attitudes through 16 hour-long interactive learning session meetings twice a week. Pre- and post-treatment testing is used to show employers whether an attitude change has taken place.
f. The responses and feedback of the employees with regard to the policies.

A study by Bennett, J. and Lechman, W (1996) explored a broader view of policy and examined both personal and situational factors that may determine employee attitudes towards drug abuse policies. Survey data from employees in three municipalities support a distinction among five attitude categories: those who are (a) dissatisfied with efforts to control employee abuse, (b) satisfied, (c) anti-policy, (d) pro-policy, and (e) uninformed. Discriminant analyses suggest that different profiles characterize these attitude groups. For example, dissatisfied employees report low personal alcohol use, high coworker alcohol use, and low self-referral whereas anti-policy employees report high personal drug use, high coworker use, and low job identity. Discussion focuses on policy as a social construction and the implications of attitude distinctions for employee training.

Perceptions of an employee assistance programme (EAP) and employees' willingness to participate in EAP activities were assessed by Harris and Fennell (1990) in a sample of 150 employees of a white collar firm, with a focus on attitudes, perceptions, and willingness to use various resources for help. Study results suggest that men and women are equally willing to use EAPs. However, their attitudes and perceptions are influenced by their familiarity with the programme in the case of women and by perceptions of programme effectiveness, personal attention, and controls in the case of men. It is noted that familiarity may be easily enhanced through newsletters and brochures. Organizations can influence and direct these factors to increase employee participation in their EAPs through efforts of management and programme personnel Morse (1988) in an article on work re-entry propounds that the recovering client's system of personal and social support after treatment is often inadequate in the workplace. Work reentry contracting involves the recovering person (or client), one or more treatment center counselors, and one or more significant people from the employing entity. In stage 1, "increasing staff's
industrial awareness," one or more staff members become familiar with the workplace realities the client faces. Convincing the client of the worth of reentry contracting is stage 2; it should be presented as an option, never forced. Stage 3 is the contracting meeting to set up contact between treatment staff and the employee assistance programme (EAP) counselor or employer. Possible contract responsibilities of the client, the employer, and the treatment center are listed. Possible payoffs of work reentry contracting for treatment centers are outlined.

e. The effects of the corporate policies on employee behavior, the necessity and importance of follow-up, job-re-entry, rehabilitation.

Cook, C.C.H.(1997) in a study on Aircrew alcohol and drug policies examined the experience of commercial airlines in alcohol and drug policy formation, with particular emphasis upon those aspects affecting aircrew. A brief questionnaire was mailed to 196 airlines listed in the 1993/4 Flight directory asking if the company had a policy on (1) alcohol consumption by aircrew prior to flight, (2) illicit drug use by aircrew, (3) use of prescribed and "over the counter" medication by aircrew, (4) screening of aircrew for alcohol/drug misuse, (5) prevention of alcohol/drug misuse among the aircrew, and (6) management of alcohol misuse in the aircrew. Ninety-two airlines (24 UK and 68 other) participated in the survey (overall rate of 47 percent). Most companies did have their own alcohol and drug policies, even though such matters are also the subject of national and international regulation. Alcohol policies mostly concentrated on regulating against alcohol consumption during flight and within a given time period relative to flight. Relatively few airlines employed screening procedures for the detection of alcohol or drug misuse in aircrews. In commercial aviation, serious alcohol- or drug-related accidents are rare; therefore, it might be argued that such policies are highly effective.
The effectiveness of self-help groups with respect to alcohol intervention and rehabilitation is discussed by Eisman, C (1988). There is evidence that participation in self-help support groups may be linked to an improvement in symptoms of physical and mental illness. In addition to Alcoholics Anonymous and other groups for alcoholism and drug abuse, there are self-help groups available to help with death, divorce, physical abuse, parenting difficulties, psychological issues, overeating, and even sex addiction and overspending. The self-help group is a coming together of people to share a common problem and exchange emotional support and practical information. The primary source of help is the members themselves. The link between employee assistance programmes (EAPs) and workplace self-help groups can be very effective. The major concerns of self-help groups in the workplace are confidentiality, sensitivity to employee's concerns, and assuring that employee participation is not reflected on employment records. It is noted that on-site self-help groups have worked in some locations and not in others. It is suggested that self-help groups can help reduce use of professional services and can develop independence and self-direction.

Foote and Erfurt (1988) have reviewed the literature on the impact of aftercare and follow-up, particularly of employed alcoholics in a workplace setting. While the long-term nature of recovery from alcoholism is well known, most studies on aftercare cover short post-treatment periods and the data suggest that 6 months is too short a period for adequate aftercare. The prevention of relapse is a post-treatment activity and the prime objective of aftercare, and the employment problems of alcoholics have not been adequately covered as it has been assumed that patients will make a smooth transition into the work world after treatment. A nontraditional system of aftercare assumes that the provider must seek out the patient if the service is to be effective. Although employed alcoholics tend to show higher recovery rates than unemployed ones, the rates of relapse among employed alcoholics are still high. It is suggested that worksites and employee
assistance programmes (EAPs) should pay more attention to follow-up and aftercare, and that additional research is needed to examine the effects of different types of aftercare content; the impact of follow-up aftercare on relapse prevention; and the cost effectiveness of various aftercare and relapse prevention strategies.

Although the occupational alcoholism programme model implies a direct relationship between participation in treatment and improved job performance, little research exists that substantiates the efficacy of the model. Seven variables which are systematically documented in every employee's personnel record were analyzed by Howard, W.C. (1990), for 35 alcoholism programme clients and a comparison group of 58 non-problem employees at a large public utility in the northeastern United States. The criteria of short-term absence, long-term absence, written warnings, suspensions, tardiness, medical clinic visits and on-the-job accidents acted as the operationalized definition of the dependent variable job performance. This study found significant expected improvements of the alcoholic group at the point of 1-year follow-up. Most observed improvements, however, were not sustained by the third year following intervention. More refined performance and outcome measures are recommended, as well as attention to programme implementation evaluation.

Kolb and Gunderson (1989) analysing the effects of alcohol rehabilitation treatment on health and performance of Navy enlisted men has found that changes in medical care utilization (rates of hospital admission and days hospitalized) and performance (rates of unauthorized absence and desertion) from pre-and post treatment for alcohol abuse were determined for a group of career Navy enlisted men. Comparisons were made with two control groups matched with the abusers on year of entering the service and age at enlistment. It was found that treatment favorably affected health and performance during the two-year post treatment period. While the alcohol abuse group showed no
change in mean number of hospital admissions from pre-to post-treatment, significant increases were reported for both control groups. Similarly, although rates of unauthorized absence and desertion increased significantly for alcohol abusers, the increases were proportionately less than those experienced by either control group.

Lawental, E. at al (1996) discuss the effectiveness of co-erced treatment for substance abuse problems detected through workplace Urine surveillance.. One hundred and eleven "coerced" participants were compared to 193 people who self referred and were employed at the same institutions over the same time period. Coerced participants had tested positive in a random test for drugs (alcohol was not included). Participants were treated at two inpatient and two outpatient treatment programmes in Philadelphia; the major components of treatment were education, group psychotherapy, individual counselling, and Alcohol Anonymous or 12-step meetings. The Addiction Severity Index (ASI) was performed as part of an initial assessment interview and at a 6-month follow-up by a blind interviewer. An unexpected urine test confirmed most self-reports of drug use. Only 8 percent of the sample declined or dropped out of the study. The coerced group was significantly more likely to be older, African American, male, and had no prior alcohol or drug treatment experience when compared to the self-referred group. Though coerced participants reported lower levels of problem severity related to their substance abuse, the problems they reported were clinically significant. Both coerced and self-referred patients showed significant statistical and clinical improvement during the course of the study. Because of the lower severity level of their problem, coerced patients were more likely to be treated in an outpatient setting. It is surprising, therefore, that the coerced patients were more likely to complete treatment in this setting usually associated with greater dropouts. One limitation to the study is that outcome was measured by self report, and coerced patients may be under more pressure to report improvement than individuals who were self-referred. The
study raises some important questions about coercion and motivation. Contrary to expectation, it appears that the coercive referral condition did not hinder the chances for successful treatment; mandatory referral to treatment and the risk of job loss may serve as a significant motivator for treatment compliance in this population of patients with a less severe drug problem. Furthermore, the fact that persons with relatively low problem severity should show significant change challenges the notion that substance-dependent individuals have to "hit bottom" before becoming motivated for effective treatment. One important question related to understanding the effectiveness of coerced intervention is whether individuals testing positive represent a sample at an earlier stage of addiction than that of the self-referred group, or whether they are a different population altogether. In the absence of intervention, do patients with positive tests become worse, so that they later refer themselves to treatment? Or do they self-treat and become abstinent without intervention? This study is important because it begins to describe persons who should be targeted for secondary prevention activities. It supports the idea that risk of job loss provides incentive to get well. If drug testing is seen as an early intervention, this article helps justify this approach.

Marsden et al (1997) examined changes in mental health, job perceptions and work performance that occurred in a cohort of 104 transportation workers referred to a company-operated alcohol abuse intervention programme. Using structured interviews, data were collected on job satisfaction, job commitment, self-rating of work performance, supervisor's rating of work performance, work problems, context-free mental health, and absenteeism. The majority of participants (96 percent) were male with a mean age of 42.4 years and were Caucasian (82 percent). In order to evaluate change over the time between the initial assessment and the follow-up (post-counselling) interview, a series of paired t-tests were performed. In line with the findings reported by other evaluations of counselling interventions, strong, significant improvements in mental health were demonstrated at the post-treatment period. Strong significant
improvements in absenteeism and both employee and supervisor ratings of performance, including attendance and relationships with colleagues and line-managers, indicated a positive work outcome. No significant treatment effects were observed for job satisfaction and job commitment. These findings indicate that distinct personal and organizational benefits are gained from counselling employees who present with a range of problems including work stress and alcohol misuse. Thus, policies and procedures that promote such intervention and especially encourage early referral of problems are to be unequivocally supported. However, counseled employees remained poor attenders in the short-term, even after significant improvements in absenteeism. This suggests that cost-effectiveness may be demonstrated only when it is assumed that poorly performing employees are expensive to remove and replace.

Parish,(1990). conducted a one year follow-up study on the relation of the Pre-Employment Drug Testing Result to Employment Status. All employees hired over a 6-month period at a large hospital underwent pre-employment urinary toxicology screening. Results of the screening were kept confidential. After a year of employment, the personnel folders of all employees studied were reviewed. Twenty-two of 180 employees (12 percent) had tested positive for drug use. Employees in clerical/aid positions were significantly more likely to test positive than were employees in professional positions (17 percent versus 6 percent). Drug-positive employees were also more likely to be young and male. Comparison of job performance variables, job retention, supervisor evaluations, and reasons for termination showed no difference between drug-positive and drug-negative employees. Eleven drug-negative employees were fired during the study; no drug-positive employees were fired. There was a strongly significant difference between clerical and professional employees on each of these variables. This study did not find a relation between drug use and job performance. The widespread use of drug screening prior to employment makes further studies of this issue important.
Participation in and response to an employee assistance programme (EAP) in a major corporation were examined by Smith-M.L. (1984). The data analyzed were obtained through a structured interview of 64 recovering alcoholics six or more months after treatment. Four major outcome variables were identified: (1) work performance; (2) income management; (3) life satisfaction; and (4) post-treatment depression. Network support systems was the only factor significantly related to positive outcomes. It was concluded that EAPs can be an asset to American productivity.

The effectiveness of employee assistance programmes (EAPs), health promotion programmes (HPPs), and quality of work life (QWL) efforts are compared, (Sonnenstuhl-1988) with a focus on their theoretical background, their methods, and their effectiveness in treating alcohol abuse and alcoholism. It is noted that although the three programmes have the common goal of improving employees' well-being and increasing productivity, they are basically competing social movements. As such, they are characterized by different beliefs about what should be changed and have different orientations towards prevention and treatment of alcohol abuse and dependence. EAPs are based on social learning theory and use a dual strategy of confrontation and counselling; HPPs have been primarily a means of improving health and containing health care costs by teaching adoption of healthy living habits; and QWL stresses the restructuring of jobs and workplace relationships to enhance morale and productivity.

The review of literature relating to the policies was discussed under the above mentioned headings. Studies concerning policies range from Macro-level studies of international experiments (Cserne & Katonah 1995), detection and prevention efforts by corporate with a focus on drug testing (Curley 1990, Dupont 1990), etc and primary prevention efforts like general broad-based health awareness programmes, counseling etc (Shahandeh 1995, 1986), and secondary
prevention initiatives like early detection, screening and referral (Lewis 1998) etc. As regards Intervention, most of the literature available focuses on the role of Employee Assistance programmes (Googins et al 1997, Fisher 1990) with an array of services including, screening, referral, outpatient and inpatient treatment etc. Some studies focus on supervisory intervention (Dawson 1998) while some stress on the need for a psychologist. However most studies have found that medical intervention, is and should be an integral part of a corporate alcoholism intervention policy—either in the form of referrals to specialized treatment centers or providing in-house treatment facilities with the existing medical infrastructure (Shain 1992, Roman and Blum 1989, etc). As regards the impact of alcohol policies, most studies (Cook 1997 etc) have found that intervention of any kind, especially medical intervention did yield favourable results and that intervention strategies if properly implemented could be very effective. As regards the feedback of the employees towards the policy, studies have shown (Bennett et al 1996) that pro/anti policy attitude depends on factors like personal alcohol use, co-worker alcohol use, etc. attitudes and perceptions are also based on its level of awareness about the policy and components. (Harris & Fennel 1990).

The exhaustive literature review on policy consideration brings to light the following observations.

1) A comprehensive alcohol policy in order to be effective should start with proper detection, primary and secondary prevention moving on to a proper intervention programme—preferably medical intervention, followed by a well-planned follow-up schedule and rehabilitative measures.

2) A clear-cut policy if properly implemented would yield desirable results for the employer in the long run, in terms of reduced absenteeism, labour turnover and increase in productivity.
3) The policy components could be as varied as the variance in attitude/approach of the corporates, existing infrastructure, their financial position etc and there can be alternatives, substitutes and functional equivalents with regard to certain specific policy components or measures undertaken.

4) By making the workforce fully aware of the company's policy, they could be made to participate effectively in the programme.

5) The feedback of the employee / his attitude towards the policy largely determines the success/failure of the policy.

The above observations formed on the basis of the study wherein the researcher developed a comprehensive alcohol policy checklist incorporating the four broad areas of alcohol policy making—detection/screening, Prevention, Intervention, rehabilitation and follow-up. This served as the yardstick on which the existing alcohol policies of the corporates were analysed. The checklist provides ample scope for functionally alternative and functionally equivalent policy components, since the problem as mentioned earlier is being analysed from a structural functional perspective. Besides this checklist other components of the survey questionnaire included data on alcohol related consequences for the workplace since the basic premise of the sociological perspective of structural functionalism involves the understanding of the complex dynamics of a problem wherein a pathological situation arising in one part of a structural whole produces a definitive impact in various other parts or sub-components of that structural whole. As is the case here, the pathological impact of alcoholism on the worker affects the company's production productivity, industrial relations climate, work environment and financial liabilities in the form of accidents, turnover, absenteeism, health investment costs etc. So the factory as a social system undergoes pathological changes due to worker alcohol abuse and the analysis of this forms an important highlight of the current study.

The detailed methodology of the study is described in Chapter III which follows.