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Early diagnosis of chronic alcoholism

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INTRODUCTION

> I am aware that the efforts of science and humanity, in applying their resources to the cure of a disease induced by an act of vice, will meet with a cold reception from many people. But let such people remember, the subjects of our remedies are their fellow creatures, and that the miseries brought upon human nature, by its crimes, are as much the objects of devine compassion, as the distresses which are brought upon men, by the crimes of other people, or which they bring upon themselves by ignorance or accidents. Let us not then pass by the prostrate sufferer from strong drink, but administer to him the same relief we would afford to a fellow creature, in a similar state from accident and innocent cause.
>
> Benjamin Rush, M.D.[1]

In 1956, the American Medical Association adopted a resolution, officially recognizing alcoholism as a disease that should be treated by physicians. "Curiously most medical schools devote less than two hours out of a four year curriculum to studying normal and abnormal drinking and treatment of alcoholics."[2] This problem originates from the many "wives' tales" about a complex disease that has diverse patterns and apparent low success rate with therapeutic trials. These tend to impede the emergence of energetic educational programs.

Historically the drinking of alcohol is considered to be a voluntary act which a person either choses to do or not to do; "the concept of treating people who voluntarily drank to excess and thereby ruining their lives was unthinkable."[3] Then in 1778, Trotter, an Edinburgh physician, first reported alcoholism as a disease. His proposal met with criticism from the public, the clergy, and other physicians. They felt that this was a moral issue

and physicians should limit themselves to the treatment of the physical ailments that resulted from excess alcohol intake, and not to the cause of alcoholism. In the 1930's, a small group of men organized a Research Council on Problems of Alcohol, and E. M. Jellinek emerged from the group as one of the leaders in the modern day studies of alcoholism.[4] Since this time large amounts of material have been written, yet alcoholism remains a disease of inexactness, at best, with regard to cause, diagnosis and treatment.

DEFINITION

The definition of alcoholism in a standard dictionary is as follows: "Alcoholism is a diseased condition caused by habitually drinking too much(ethanol)."[5] This indicates that habitual drinking is the cause of the disease. Keller defines alcoholism as follows: "Alcoholism is a chronic disease manifested by repeated implicative drinking so as to cause injury to the drinker's health or to his social or economic functioning."[6] Catanzaro states that alcoholism is the chronic disease from which the alcoholic suffers. An "alcoholic is defined as a person who has become dependent on the drug, alcohol, consequently drinking more than the socially accepted norm for his culture; his excessive drinking damages his health and his relation to his family, friends and job."[3(p.6)]

The three definitions imply the chronic and habitual use of alcohol. The last two definitions state that drinking is the result of the disease, and not the cause. These

definitions also declare that social, economic, health and/or family functions must be impaired. For the remainder of this paper both "alcoholism" and "chronic alcoholism" will refer to Keller's definition.

PREVALENCE

The prevalence of alcoholism in the United States has been astimated in many ways, but an accurate figure is impossible.

Jellinek[7] proposes a formula in which the number of reported deaths from cirrhosis of the liver in a given year, D, is multiplied by the assumed constant percentage, P, or such deaths attributable to alcoholism (different for men and women), and is divided by K, another constant representing the percentage of all alcoholics with complications, who die of liver cirrhosis. The result can be multiplied by R, a presumed ration of all alcoholics with complications in the given place and time, in order to obtain the total number of alcoholics with and without complications. The formula with A = all alcoholics, thus reads: $A = (PD/K) R$.

The Jellinek formula is the subject of criticism. It is pointed out that the proportion of deaths attributable to alcoholism might not be an invariable constant; and that the proportion of alcoholics who die of liver cirrhosis might change with the improved nutritional status of the population. Also as improved methods of reporting deaths attributed to cirrhosis of the liver are

employed, the credibility of the Jellinek formula is further jeopardized. This lead Jellinek to suggest the abandonment of the formula to further estimate the prevalence of chronic alcoholism.

The Joseph Rowntree Social Trust[8] makes a survey with the help of probation officers, health visitors and doctors. Estimates are made of the number of compulsive drinkers in many communities of England and Wales. From these results the group feels that the Jellinek formula is still accurate, when one estimates the number of alcoholics for whom treatment and care should be provided.

Mulford and Miller[9] apply their "Preoccupation with Alcohol Scale" in identifying and extimating the prevalence of alcoholism in a large representative sample of the Iowa population. They assume that a score of I or II on the "Preoccupation with Alcohol Scale" by a person makes him a likely candidate for the label "alcoholic". Among the 689 drinkers, 35 persons obtained a score of I or II. This suggests an approximate 5% rate of application of the "alcoholic" classification to the general drinkers population. They also find that 83% of the alcoholics are male, while comprising only 50% of the sample population. Approximately the same ratio of males to females are found in the heavy drinking population. One should emphasize, that in regard to this scale, the prevalence of alcoholics among the drinkers is about 5%. If you include in the "presumed alcoholics", those individuals that are "heavy drinkers" and answer questions in the affirmative that they drink for extreme

personal effects ("to forget that I am not the kind of person I really want to be," or "to get along better with other people," or "to feel more satisfied with myself"), the "presumed alcoholics" of the general population are still about 5% of the total.

Due to the variables one finds in religious groups, ethnic groups, urban and rural population, educational levels, and mere recognition of the "nonskid row" alcoholic, any estimate, regional or national, is inaccurate. The National Council on Alcoholism[10] estimates that there are 90 million people in the United States who drink alcoholic beverages, and of these 6,500,000 are probably alcoholics. This is a staggering figure, but does not represent the total problem. Industry[11] feels that about 3% of all job holders are alcoholics. The average alcoholic loses two days of work per year beyond the number lost by the average worker. Productivity is lower, accidents on and off the job are increased, and time and money are diverted by private, governmental and medical agencies for custodial and therapeutic care. It is estimated that in 1959, the cost to this country was 2 billion dollars annually. More importantly to the alcoholic, his life expectancy is decreased by 12 years.

PURPOSE

As a student, who is interested in a family practice, and believes that a problem of this magnitude necessitates diagnosis and treatment by the family physician, this paper

on the problem of alcoholism is chosen with the following goal in mind: to achieve a better understanding of alcoholism. Through this understanding I hope to find the early diagnosis of alcoholism more probable. Assuming that the early diagnosis aids in the treatment, I can help the alcoholic overcome his disease.

ETIOLOGY

Lisansky[12(p.319)] writes, "It is generally excepted that the etiology of alcoholism is a complex and poorly understood phenomena." There is an interaction between various physiochemical, psychological and sociological predisposing factors. If the complete personality of an individual is critically evaluated at a given point of time, the first drinking experience, the following must be considered:

X = certain aspects of the physiochemical state of the person
Y = certain aspects of the psychological state of the person
Z = certain aspects of the sociological state of the person.

Y may be the sum of the personality traits. Z includes the attitudes of the person's peer group, the exposure to alcohol, and the social history of the person. Also one must include the possibility of the physiological response to alcohol, and the effect of the medical history on the psychological development. At all stages of development these three factors are intertwined.

It seems reasonable to assume, until specifically proven otherwise, that there is no individual characteristic of

X, Y or Z that is solely responsible for the development of alcoholism, or that there is any fixed combination of X, Y and Z that results in this development. These three factors will be discussed individually, but one must try at all times to be aware of the intertwining relationship of these etiologic factors.

Psychological Theory

The two psychodynamic terms that are frequently sited to describe characteristics of the alcoholic are "orality" and "homosexuality." After birth the biological need for food arises, and is satisfied by sucking. With sucking there is an interaction between the mother and the infant. Since the infant is stimulated by the play and fondling that he receives, more than just the biological needs of the infant are met. The mouth is spoken of as an erogeneous zone, and satisfaction which he derives from this pleasure-giving zone are called auto-erotic. If a person is beyond the age, when the mouth should have ceased to be the focus of satisfaction, he continues to be mouth centered; he is said to be of an oral type of personality. During the oral stage of development the infant is also dependent upon an adult, usually the mother, for all basic physiologic needs. A person whose satisfactions are mouth centered is also expected to be a dependent type of person.[12(pp.22-23)] During healthy psychosexual development, the child forms an identification with a member of the same sex. The homosexual identifies with the mother as the dominant person, and seeks out males as sexual companions,

because of his fears of incest or loss of the maternal relationship. This may manifest itself in many alcoholics as a difficulty in forming heterosexual relationships, strong mother attachment, an adolexcent-like seeking out of male companionship, overt homosexual experience or a desire to form close interpersonal ties with men.[12,13(p269)]

Blum[14] states that alcoholsim is a substitute for emotional adaptation, is a means of dealing with conflicts and attendant psychic pain, and should be attributable to a multitude of specific failures in emotional growth. It is a result of developmental failure either, as a fixation at various stages of growth or regression to previously outgrown stages.

Sutherland etal[15] and Syme[16] both report that there is no way to conclude that one type of person is more likely to become an alcoholic than another type. Blane[17] and Knight[18] state that there are characteristics that alcoholics have in common, and like individuals' characteristics, these vary from alcoholic to alcoholic. The next section is devoted toward explaining a few characteristics of the "alcoholic personality".

Blane[17] states that man is a dependent creature from birth, but society affords little opportunity for dependency to grow and mature. Consequently, the tone and the early flavor of dependency needs remain throughout life, but are repressed.

The dependence and immaturity may result from a family constellation during the nursing(oral) period of infancy.

Knight[18] finds that characteristically the mother is overindulgent, and the infant is emotionally deprived by the father. Blane[17] agrees in general, feeling that the mother overindulges or emotionally deprives the infant. Deprivation by the mother increases the need to be depedent in the infant, because basic psychodynamic needs of the infant are not met. Overindulgency, on the other hand, gives the child a sense of omnipotence, which tends to fix attitudes of dependency in the infant.

Clinically the alcoholic may not appear as overtly dependent, but the personality revolves about three compromises developed to cope with the conflict over wishes to be dependent and the complimentary fear that direct expression of dependent wishes will result in loss of self-identity. The first of these compromises is repression of independency, resulting in overt dependency and passivity. The second is the repression of dependency, resulting in a person who has submerged from the awareness the wishes to be dependent, and developed ways of acting that are approved by society as being independent and masculine, while simultaniously gratifying dependency. This is the counterdependent alcoholic. The third compromise results in those that fall midway between the two extremes. At one time he may lean on others, and at another time he may deny others for giving free unwanted advice. This results in the dependent-counterdependent alcoholic.[17]

The alcoholic is pictured by some as self-destructive.[19] It is undeniable that he does commit a slow suicide, but

this is really a manifestation of anger and depression. This can also be traced to mismanagement of the oral phase of development. Blum[12] feels that the punitive parent causes the infant to feel betrayed because dependent needs are not met. Betrayal also occurs in the infant of overindulgent parents who is forced by society to "leave the nest" when he has not been prepared to have his dependent needs met in a mature manner. These betrayals cause anger toward the parents in the alcoholic, but this is not acceptable because society also forces him to love his parents. The anger and depression from the inability to express dependent needs create an unpleasantness and conflict. Alcohol allows him to withstand this conflict over dependent needs. "The alcoholic drinks not because he wants to kill himself; he drinks to perserve himself and maintain his integrity."[17(p46)]

Denial is frequently referred to as the hallmark of the alcoholic personality. Blane feels that denial is based upon the conflicts arising from dependent needs. The overtly dependent alcoholic probably does not deny that he is an alcoholic and has lost control. By admitting alcoholism he gains sympathy, and can get treatment which meets some of his passive dependent needs. The counterdependent alcoholic utilizes this defense mechanism to the utmost. This is one way that he can maintain the repression of dependence because it is impossible for him to sustain his pride, dignity, and masculinity; yet be consciously unaware that he is in the clutches of alcohol.[17]

Discussed earlier are the characteristics of anger and depression. Whenever the alcoholic is denied a wish, request, desire or demand; as so frequently happens in our society, he reacts in an infantile manner: such as having the nipple withdrawn in midfeeding. He becomes overly frustrated and interprets these inconviences as direct personal rejections. He cannot tolerate these frustrations nor the impulsiveness that has never matured. The result is his attempt to drown them in alcohol.[17]

When an infant is most dependent, he is most omnipotent. At this stage warmth, food and love are given, hopefully, without the infant realizing he needs them. An alcoholic still desires these conditions of the infant. When drinking, he can regress, and have the feeling of omnipotence. It is at this time, he will have the "best business deals in the making", or be the "best at physical activity".[3]

When the alcoholic is sober, he is forced to be in a reality-oriented world, and the feeling of helplessness and dependency well-up inside him. At this time he is overly critical of himself.

Blum[14] writes that the homosexual tendencies in alcoholism are a result of a fixation or regression to the anal stage of development. The alcoholic has developed a sociallymore adequate ego defense; sublimation. The narcissistic attitudes of the oral stege have been transmitted in love for others, albeit the same sex. The repressions may breakdown under the influence of alcohol, and lead to

overt homosexual contacts. However, they usually lead to "barroom drinking" and "bosom buddy drinking".

In summary, the psychodynamic theory attempts to explain some of the personality characteristics of the alcoholic as well as a portion of the etiology of alcoholism. These characteristics will not be seen in all alcoholics, nor will all of them be seen in any alcoholic. Blane[17] thinks that dependency is the central characteristic. This is expressed as: (1) overtly dependent alcoholics, (2) counter-dependent alcoholics or (3) dependent counterdependent alcoholics. The type of dependency will determine how the alcoholic expresses the characteristics of denial, sex-roles, tension, frustration and self evaluation.

Phsiochemical Theory

The physiochemical theory as an etiological factor of alcoholism is relatively new. A great deal of investigation is being done. I have chosen three studies to present.

Williams[20] is one of the most avid supporters of the nutritional aspects of alcoholism. It is his feeling that people drink alcohol because they like its taste and its relaxing effects. It can also be due to social pressure or a physiological urge to drink. He says that without this physiological craving, typical alcoholism probably would not exist, and the physiologic urge to dring is genotrophic in origin. Partial genetic blocks decrease, but do not necessarily destroy, the ability to make individual enzymes. This causes the person to need an increase in the amount

of certain foods. If the person drinks in substantial amounts, the total caloric need he normally obtains from foods that are high in minerals, vitamins, and amino acids, is partially met by the alcohol which does not contain the factors mentioned above. This results in the partial defect of the enzyme systems manifesting themselves due to the lack of raw materials. They adversely effect the hypothalamus or other parts of the mechanism governing the physiological craving for alcohol. Animal studies show that malnutrition causes the control mechanism to function poorly and this leads to an increase craving for a poor diet, be it plain water or alcohol. He indicates that stress and tension tend to increase the physiological urge to drink. There are many unanswered questions in this theory but it should be a consideration in the etiology of alcoholism.

Fleetwood[21] describes the experimental work in which various chemical agents are found in people with the emotions of anxiety, tension and resentment. These emotions are some of those felt by the alcoholic, and are also discussed under the psychodynamic theory of alcoholism. The subjects are comprised of normal people and emotionally disturbed patients; the alcoholic patients are separated from the latter group. The blood from anxious patients has an increase in a noradrenergic substance with the amount corresponding to the clinical intensity of the emotional reaction. With a given amount of emotion a greater amount of this substance is found in the patients than in the normal people. A cholinergic substance is found in the

patients and the normal subjects who are under emotional tension. A second cholinergic like substance is found in patients and normals who are in a resentment producing situation. Alcohol is then given to the patients and the normal subjects. The emotions and the biochemical substances (a noradrenergic material and two different cholinergic materials which are not chemically identified) are again measured.

A summary of the results reveals that resentment is a predominant emotion in the alcoholic and alcohol decreases or abolishes completely the emotion of resentment as well as the biochemical substance that accompanies the physical symptoms. The emotions of anxiety and tension are present to a lesser degree, but they decrease with the ingestion of alcohol. The most marked difference is that when tension is present in the alcoholic group it is abolished when alcohol is consumed. In the non-alcoholic group it is not reduced to the same degree. There are some studies which are not pursued in this paper that indicate the ingestion of alcohol does not relieve anxiety, but actually increases this emotion.

There is no proven association between disorders of the endocrine system and alcoholism. Kretschmer's[22] review finds that 14 out of 50 alcoholics suffer from mild endocrine disorders. These include: hyperthroidism, hypothyroidism, diabetes mellitus, physical infantilism, heterosexual stigmata, and severe premature menopause.

There does not seem to be a great increase in endocrine disorders and there is only a casual relationship between the onset of the disorder and alcoholism. It is impossible to determine whether the endocrine disturbance leads to the emotional disturbance which in turn leads to alcoholism, or the alcoholism leads to the emotional disturbance which leads to the endocrine disturbance, or that the emotional disturbance leads to the alcoholism and the endocrine disorder which are independent of each other.

Sociological Theory

Bales[23] feels that there are three general ways in which cultural and social organizations effect the prevalence of alcoholism. The first is "the degree to which the culture operates to bring about acute needs for adjustment, or inner tensions, in its members." The second is "the sort of attitudes toward drinking which the culture produces in its members." The third is "the degree to which the culture provides suitable substitute means of satisfaction."

Bacon[24] writes that the economic specialization of Western Civilization enormously increases the problems not seen in more primitive societies.

> Complexity has resulted in vertical and horizontal stratification, in mutual ignorance and disinterest of societal subgroups, in extreme interdependence of subgroups, in the emergence of money as a controlling factor in human life, and in an individualism marked by increased power of each person and the decreased power of such all purpose, intimate groups as the family and small neighborhood.[24](p.92)

It is his feeling that this has effected the use of alcohol in a number of ways. It destroys the three former functions

of alcohol which were of importance to primitive cultures: food value, medicinal value, and religious-ecstasy value. Alcohol has also emerged as a major method for the relief of inhibitions, anxieties, aggressive feeling and tension; thus allowing relaxation in a society where pleasure is one of the few personally significant integrative mechanisms. The complexity of society has also increased the weight of old anxieties and added new ones, as well as making it more necessary and more difficult to make "contacts". Alcohol aids in both these respects. Because of a person's mobility and individual independence, the control of alcoholism is more difficult in a complex society than in simpler societies.

Bales[23] states that the attitude of various groups include complete abstinence, ritual drinking, convivial drinking and utilitarian drinking. Complete abstinence is taught by many religious groups throughout the world. The Moslems represent one such group; however, it is also taught in various Protestant denominations in the United States. Alcoholism is relatively rare among these groups, but it is one way for individuals in these groups to express dissent and aggression.

The ritual attitude is seen with the Orthodox Jews. "The beverage is regarded as sacred; it is consecrated to that end and partaking of it is a ritual act of communion with the Sacred."[23(p487)] This makes drunkenness unthinkable. Popham[25] supports this viewpoint when he shows that the

farther the Jewish group is removed from orthodoxy, the greater the prevalence of alcoholism.

Convivial drinking is a mixed attitude. This drinking is ritualistic in its symbolism of solidarity, and utilitarian since the "good feeling" is expected by the drinker. Drinking is in order whenever friends meet, business dealings are carried on, or religious activities take place. This type of drinking is seen in the Irish culture and frequently leads to utilitarian drinking.

The fourth attitude is that of utilitarian drinking. This represents the hedonistic use of alcohol. The alcohol is a panacea for many sicknesses and emotional maladjustments which are anxiety and tension producing.

The third cultural factor is the degree to which the culture provides suitable substitutes for the relief of tensions. Perhaps it is at this point that the intertwining of the physiochemical, psychological and sociological aspects of the etiological factors can best be observed. If the development of the individual is such that he is unable to cope with the anxiety and the tension of society, he may become an alcoholic or develop psychoneurotic, psychotic, psychophysiologic or personality disorders. The disease depends upon the sociological attitudes to which he is exposed and the physiochemical predisposition he possesses.

DIAGNOSIS

Pattison[26] points out the hesitancy of physicians to

diagnose alcoholism. It is his feeling that there is no alcoholic disease, but the misuse of alcohol is involved in a variety of syndromes. He stresses that it is misleading to focus the diagnosis on whether or not a person is an alcoholic, but more correctly that the diagnostic task is to define what problems a person has with alcohol.

Jellinek[27] writes that every country has an alcohol problem similar to the way "alcoholism" is pictured in the United States, but that in these countries there are other problems arising from alcohol. These may overshadow the "American type of alcoholism". The "American alcoholic", in The Days of Wine and Roses and Come Back Little Sheba, is created by Alcoholics Anonymous in its own image, and Jellinek[27] believes this to be the predominate "specie" of alcoholic in this country. There are other species of the alcoholic, and in each species there are various stages of development.

Jellinek's alcoholic species are the alpha alcoholic, beta alcoholic, gamma alcoholic, delta alcoholic, epsilon alcoholic, and the explosive drinker.[27] It should be emphasized that addiction is not necessary for alcoholism. Heavy weekend drinkers are present in the Jellinek classification and they are not considered to be addicted.

The alpha alcoholic is one who is purely psychologically dependent upon the effect of alcohol to relieve physical and emotional pain. His drinking patterns violates rules of society; such as time, occasion, locale, amount and effect,

but do not lead to loss of control or inability to abstain. Many people are this type of alcoholic for 30 years, while others progress to gamma alcoholism. The primary disturbance is a disruption of interpersonal relations and family budget.

The beta alcoholic develops one or more of the complications of alcoholism without either the physical or psychological dependence upon alcohol. These complications include polyneuropathy, gastritis and cirrhosis of the liver. This person is an alcoholic becasue he damages his health. He progresses to gamma alcoholism less frequently than do the alpha alcoholic.

The gamma alcoholic develops an increased tissue tolerance to alcohol, adaptive cell metabolism, withdrawal symptoms, "craving" for alcohol and loss of control. This is the type found most frequently in Alcoholics Anonymous, and will be discussed in more detail in regard to the phases of his development. He produces serious damage to his health, interpersonal relationship, and financial standings.

The delta alcoholic shows the first three characteristics of gamma alcoholism as well as a lesser form of the fourth characteristic: he has no ability to abstain, instead of a loss of control. This is the type that is seen in France and other countries with a large wine consumption. Many women alcoholics in the United States are possibly classified as delta alcoholics. These are not found in Alcoholics Anonymous because they rarely go through the social and psychological experiences of the gamma alcoholic.

The epsilon alcoholic is the least understood species. He is the periodic drinker. Because the gamma alcoholic loses the ability to abstain, he is classified as an epsilon alcoholic under certain conditions. This condition exists when there is a long period of abstaining followed by "falling off the water wagon".

The explosive drinker is the last major species. This person is one who follows a cultural pattern of excessive weekend drinking. He causes damage through rowdiness, absenteeism, impairment of family budget and destruction of family relationships.

The delta alcoholic is studied more thoroughly in the United States. This is because he is the most prominent member of Alcoholics Anonymous, the most available and often the most willing to take part in detailed studies. He is an addicted alcoholic, and tends to have a recognizable progression of symptoms. Jellinek[28] points out that not all the symptoms occur in the same sequence, nor do they all occur in all alcoholics. His phases are: prealcoholic symptomatic phase, prodromal phase, crucial phase and chronic phase.[28]

The first phase is called the prealcoholic symptomatic phase. The person begins as a typical social drinker. He soon learns that alcohol tends to reduce tension, and he uses it for this purpose. As time elapses, there is an increase in tolerance of alcohol and an increase in the use of it. He does not become overtly intoxicated, but becomes known as the "heavy" drinker in his social circle. By this

time he progresses from "ocassional relief drinking" to "constant relief drinking". Many people remain in this phase with minor problems of health, finance and social relationships: others will graduate to the prodromal phase.

The sudden onset of "blackouts" herald the change to the prodromal phase. These occur after the ingestion of a medium amount of alcohol, and are characteristic of the prospective alcohol addict. The alcohol becomes a drug which the person needs. Other characteristics include: surreptitious drinking(finding occasion to have a few extra drinks), preoccupation with alcohol(fortification before a social event), avid drinking(gulping the first two or three drinks), guilt feelings about the drinking and avoiding reference to alcoholism. In the prodromal pahse rationalization is not strong, and there is a fear of the consequences of drinking. Interruption of the process may be more successful here if the diagnosis is made at this stage, and steps are taken to initiate therapy.

The next phase is called the crucial phase. This is characterized by the loss of control. The person can not stop drinking until he is too intoxicated or too sick to continue. A social drink may initiate the bout without any craving on the part of the alcoholic. The person has not lost the ability to abstain, only the ability to stop when he ingests the alcohol. It is during this phase that rationalization develops, and the "alcoholic alibis" are heard.

Characteristically the person will drop friends and quit jobs as an anticipatory defense to the inevitable. He changes his pattern of drinking(will not drink before noon) to control his trouble; but all fails, thus he begins to regularly fortify himself in the morning. The family habits will change; other members either isolate themselves to avoid embarrassment or increase outside activities to avoid home. It is at this stage that the alcoholic often has his first hospital admission because of poor nutrition or other complaints: frequently gastrointestinal tract disorders occur. This person is not a "skid row" derelict since his family is still intact, he is employed and he has friends.

The chronic phase occurs when the last breakdown of resistance occurs, and there is prolonged intoxication. Rationalization fails, and the addict admits defeat. This is the stereotype of alcoholism: the "skid row" derelict.

It is known that of the estimated 6.5 million alcoholics in the United States, probably less than 20% are in the chronic phase. Many of the remaining 80% are located in the preceeding phases, some will progress, others remain fixed. Another group would be classified as nonaddictive alcoholics.[28] These differ from the addicted alcoholic because there is no clear-cut phasing. However, there is a progressive exacerbation of the use of alcohol. Blackouts occur only rarely, and the loss of control is not experienced. They can abstain and avoid drunken behavior whenever the social situation

requires it. They also can slide to the bottom of society.

Paramount in making a diagnosis of alcoholism is the entertainment of that diagnosis. Every physician and medical student knows that the derelict is not the only type of alcoholic. Yet, Wolf and associates[29] show that even with the knowledge that a study is being carried out, physicians fail to diagnose alcoholism in the nonderelict more frequently than in the derelict. Blane and colleagues[30] find physicians prefer to make a medical diagnosis in known alcoholics if they voluntarily come to the emergency room, are moderately well dressed, married, are employed, list their nearest relative as a wife, and if she has the same address as his.

Pattison[28] feels that to make an early diagnosis, one should be alert to any functional use of alcohol. The functional use of alcohol includes using it to relieve unbearable tension, to smooth over feelings after arguments, to combat fear of isolation, or as an excuse to indulge aggressive and sexual impulses. These uses of alcohol are not discovered during a history and physical by the brief question; "How much do you drink?"

"Alcoholism has replaced syphilis as the chief mimic of other disease states."[31(p52)] The patient may present himself to the physician with any number of complaints. Morning nausea and vomiting are common in the alcoholic as well as abdominal distention, epigastric distress, belching, diarrhea or constipation, peptic ulcer disease and pancreatitis.

Most of the other medical illness one finds in alcoholism are associated with the more advanced forms of the disease. In evaluating the gastrointestinal disorders, the studies often reveal no abnormality, and a diagnosis of a psychophysiologic disorder is made. Astuteness and consideration of alcoholism may result in the correct diagnosis, and the initiation of therapy with favorable results may terminate or change the progress of the disease before further deterioration.

Accidents of any type, but expecially automobile accidents, should alert the physician to the possibility of unrecognized alcoholism. Frequent burns on the arms and legs of housewives may indicate a problem with alcohol. Senseman[32] says that excessive smoking in a female is an alerting sign for further investigation. The pediatrician should consider parental alcoholism in any emotionally disturbed child, and especially in the battered baby syndrome.

Bailey and associates[33] find in Washington Heights, a section of New York City, that virtually all alcoholics can be identified by questioning the individual and the family members about problems of finance and health as well as family arguments. Selzer[34] is developing a screening test called the Michigan Alcoholism Screening Test(MAST) which is composed of 26 questions related to the three broad categories of health problems, financial problems and family arguments. He feels it will be a great help in removing the diagnosis of chronic alcoholism from the realm of guess work.

SUMMARY AND CONCLUSIONS

The literature pertaining to the prevalence, definition, and etiology of chronic alcoholism and the diagnosis of early alcoholism is reviewed. Special attention is directed at the "alcoholic personality" and its relationship to dependency as well as the various "species" of the alcoholic and phases of the alcoholic's addiction.

The etiology of alcoholism and the definition of early alcoholism is not established. The early diagnosis of an undefined condition raises many questions as to the possibility of accurate diagnosis and the institution of proper therapy. I feel that the disease should be considered to be a behavioral illness, and that any functional use of alcohol(described by Pattison[26]) should arouse the suspicion of the possible misuse of alcohol. The misuse of alcohol can represent any of the less overt symptoms of the phases of alcoholism as described by Jellinek.[28] If the physician feels that a diagnosis of alcoholism is probable, he should pursue it, and attempt to establish it.

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