A Comparison of Hospitalized and Non-Hospitalized Male Alcoholics on the Basis of Anxiety and Depression

Linda J. Townsend

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I am particularly indebted to the agencies and their staffs who assisted me in obtaining volunteers for this research project. Their assistance has been invaluable. In this regard I would like to extend my special thanks to Dr. C. M. Schrier, Medical Superintendent of the Kalamazoo State Hospital; Mr. Maurice Kelley, Executive Director of the Alcoholic Information Center; S. G. Armitage, Ph.D., Administrator of the Alcoholic Rehabilitation Unit at the Veterans Administration Hospital; and Mr. Robert Barnes of Alcoholics Anonymous.

Finally, I wish to extend to all those Alcoholics, who gave of their time in volunteering for this project, my hope that the results will justify their individual labors.

Linda J. Townsend
MASTER'S THESIS M-2334

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Western Michigan University, M.A., 1970
Psychology, clinical

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INTRODUCTION

In the past thirty-five years, a considerable body of knowledge on alcoholism has been accumulated through intensive research efforts. The objective of the present study was to contribute to present knowledge and research, and to encourage further exploration into the causes and treatment of alcoholism.

A review of the literature on alcoholism indicated that anxiety and depression are significant factors in the characteristics of alcoholics. An investigation of fifty alcoholics over a five year period, supported by the National Research Council (Committee on the problems of Alcohol) and carried out by a team of investigators from various disciplines, resulted in the general opinion that almost any personality disorder could form the background of chronic alcoholism. But, that there are two large groups of personality derangements among alcoholics, both of which relate to the mood and the emotionality. The first group belongs to the manic-depressive or cycloid disorders; the second concerns people who feel moody, isolated, tense, and anxious in society (Diethelm, 1955).

Jellinek (1942) reported on one thorough investigation on 100 chronic alcoholics without psychosis at the Elgin State Hospital as compared to 100 normal controls who were equated with the alcoholics' age and education.

In a study of the 'temperament' of these groups she used Humm and Wadsworth's temperament scale based on Rosanoff's theory of personality. The findings were that chronic alcoholics are not a homogeneous group as far as
temperament is concerned; they are distinguished from normal controls only roughly with many exceptions. A more or less characteristic picture of the chronic alcoholic was found to be: He has a comparatively weak degree of restraint, mental poise and stability; he has difficulty in controlling his moods and desires, as well as their overt expression. He is slightly more selfish, conceited, and hence more antisocial, than the average individual. He has relatively strong cycloid tendencies, pronounced swings in mood and activity, together with distractibility and lack of attention. His moods alternate between the extremes of euphoria and optimism with heightened activity on the one hand, and irritability, with a gloomy, sad, apprehensive mental state with lessened psychomotor activity on the other.

It is generally agreed that different types of emotions co-exist in the same person and influence each other. As a reaction to intense emotions, others may develop. However, the intensity of the primary emotion must be distinguished in order to obtain a better understanding of the alcoholic's personality, and for clues as to emotional problems involved. The pattern of each alcoholic is different, and similar emotional experiences have a different meaning to each one (Diethelm, 1955).

Attempts have been made by numerous researchers to separate out primary causative factors in alcoholism, and it has been discovered that it is a futile attempt to consider one factor alone for alcoholism. It is more commonly agreed that there are several factors interwoven in the personality that lead to chronic alcoholism. Anxiety and depression have been cited numerous times for their presence in the various stages of alcoholism. According to Jellinek (1960), alcoholism begins as a symptom of anxiety and becomes a clinical syndrome with psychological, physical and social symptoms. Rock and
Zubin (1954) theorized that, in the alcoholic condition, the underlying depression may be enhanced by the alcohol, and the residual depression becomes part of the vicious cycle of a recurrent bout with alcohol.

Gaylin (1968) compared and contrasted depression and anxiety. Anxiety is seen as a reaction to danger, indicating the ego's anxiety to survive. The ego prepares for fight or flight; whereas in depression the opposite takes place. The ego is paralyzed because it is incapable of meeting the danger. Anxiety and depression are related to each other in the same way as are fear and grief.

Every neurotic state of depression, just like every anxiety-state, to which it is closely related, contains a tendency to deny life.

Frustration and tension (anxiety included) has been one of the most frequently mentioned conditions for starting the frequent and large intake of alcoholic beverages. However, it is not the variation in the degree of frustration, etc., but rather differences in the capacity to cope with frustration that accounts for 'relief' drinking. As anxiety is a harassing state and alcohol is undoubtedly a tension-reducing substance, it is understandable that alcohol is sought in instances of this emotional state. This is generally the case when an individual has not learned to use other means for the reduction of this uncomfortable state of mind, and especially when society facilitates and encourages the use of alcoholic beverages.

In view of the past research on depression and anxiety in alcoholism, the main interest of this present investigation was to
determine which emotion predominates in the non-hospitalized alcoholic versus the alcoholic who is hospitalized. An attempt was made to determine if there was any difference between these emotions in alcoholics and that of a normal population.

No classification or differentiation was made in this study between those alcoholics diagnosed as a chronic alcoholic, an acute or excessive drinker. In the research a broad operational definition of an alcoholic was that of an individual who had used alcohol frequently and in large quantities to such an extent that it had interfered with all aspects of his life (including physical, personality, and social aspects); that he was capable of overcoming the habit of his excessive use of alcohol, but either had not been aware of the necessity for it or had not considered it a severe problem. "A condition in which an individual harms himself or his family through the use of alcohol, and either cannot be made to realize it, or realizing it, no longer has the ability to overcome the habit, illustrates the pathological dependence on alcohol" (Diethelm, 1955).
METHOD

Sample

It was determined that 50 cases from each of the categories of alcoholics would provide enough information in order to do a statistical study. The figure of 100 cases was arrived at so as to allow for time limitations and, at the same time, supply adequate data with which to draw some specific conclusions. It was further assumed that comparisons could be made between these two groups on the basis of age, marital status, children, length of drinking problem, and age when the drinking was first considered to be a problem.

Hospitals within the local area having alcoholics were Kalamazoo State Hospital and the Veterans Administration Hospital in Battle Creek, Michigan. The alcoholics who were hospitalized had been considered a nuisance to either themselves, their families, or society and were hospitalized for their own welfare and rehabilitation. Admission to a hospital was on the basis of excessive and habitual drinking, as opposed to a physical or mental disorder, i.e., psychosis. Those alcoholics not in a hospital were obtained through the local Alcoholism Information Center and Alcoholics Anonymous. These alcoholics were receiving treatment through their respective organizations either of their own volition or via family persuasion.

The Alcoholic Rehabilitation Unit of the Veterans Administration
Hospital has a bed capacity of 56 which is generally filled to capacity. Since their program for each alcoholic runs for eight weeks, it was anticipated that the total of 50 subjects would not be filled by that hospital, as some individuals would be in the process of being admitted while others would be in the stage of being discharged. Therefore, the remaining hospitalized cases (nine) were obtained from the Kalamazoo State Hospital. In order to equalize this alcoholic group from two separate agencies, those cases from the Kalamazoo State Hospital were chosen which had a hospitalization of two months or less.

The non-hospitalized cases were received through the cooperation of the Alcoholics Anonymous, and Borgess Hospital's Out-Patient program under the auspices of the Alcoholic Information Center in Kalamazoo. Approximately 40 cases were received through the Alcoholics Anonymous and the remainder from the Alcoholic Information Center.

The investigator was interested in only those cases where an adult male drinking problem situation was apparent. In order to determine whether drinking was involved at all, an investigation was made for a specific reference to a drinking problem. Those who were hospitalized were admitted for the specific problem of excessive and habitual drinking. Those non-hospitalized cases had either been hospitalized in the past for a drinking problem, had come to the attention of the courts and were required to attend out-patient alcoholic treatment, or became a nuisance to themselves, their families or their employers and sought treatment on their own initiative.
In order to secure supplemental information, a questionnaire was designed (see Appendix B). The questionnaire consisted of 20 questions covering the following areas: 1) socio-economic background, 2) treatment for alcoholism, and 3) other factors relating to drinking. Both closed and open-ended questions were used. Three specific questions were used in attempt to validate the information obtained. The three questions were: 1) age, 2) how long have you had a drinking problem, and 3) at what age did your drinking become a problem to you. These data, when integrated with the answers to the remaining questions, were helpful in determining the validity of that data used in the final tabulations.

Socio-economic data consisted of basic, descriptive facts which are not subject to interpretation. Such items as age, marital status, number of children, military service, education, and employment facts were obtained. These data were treated as supplemental information surrounding the primary data received regarding anxiety and depression. The socio-economic data are presented in the Appendix A on a comparative basis between the two alcoholic groups.

Data regarding treatment for the alcoholism were not expected to be uniformly available in all cases. Several subjects had numerous admissions to hospitals and were unable to recall all the particular instances and their length of hospitalization. Consequently, a comparison was made on the basis of percentage of each group who had had previous hospitalizations for a drinking problem.
The specific question pertaining to their being a recipient of professional treatment was also considered not subject to interpretation. Numerous alcoholics considered their attendance at Alcoholics Anonymous professional treatment, and those at the Veterans Administration Hospital attended AA meetings as it was mandatory. Data in this respect would be biased as those hospitalized were all presently receiving professional treatment for alcoholism.

Other factors relating to drinking consisted of four questions: 1) do you have a problem with alcohol, 2) do you feel your family and relatives understand your drinking problem, 3) do you want to give up alcohol, and 4) what do you feel your chances are of overcoming this problem. These questions were supplementary to the main purpose of the study, and were considered contributory to the basic psychological factors being subject to study. Emotional overtones in these questions, i.e., pessimistic attitudes, contributed to the depressive features (see Appendix A).

The most quantitative parts of the study were the anxiety and depression scores obtained from the two independent groups of alcoholics. Supplemental data were obtained from statements about the drinking problem requested on the questionnaire. The reasons for inclusion of these questionnaire items were secondary to the study. They assisted in the description of the problem and reflected general attitudes on that problem.

The Self-Rating Depression Scale (SDS) is a diagnostic instrument which provides a measure of the severity of depression in depressed patients and in patients with other emotional disorders.
The SDS may also be useful as an adjunct to clinical judgment in the
differential diagnosis of depression and anxiety. Statistical studies
indicate that the SDS, though brief, correlates with other more time-
consuming depression scales in current use (Zung, 1965).

The SDS is comprised of a list of statements based upon widely
used diagnostic criteria. Each statement reflects one common
characteristic of depressive disorders. These characteristic items,
20 in all, comprehensively delineate affective, physiologic and
psychologic aspects of depression (Zung, 1965). Although all items
are common concomitants of depression, there are six questions con-
sidered most typical of primary depression and are less likely to be
correlated with other emotional disorders according to Zung.

It is interesting to note that the SDS was able to
differentiate between the same groups that were also
differentiated by the Minnesota Multiphasic Personality
Inventory depression scale, namely, the depressive reaction
group from the anxiety reaction, personality disorder, and
transient situational adjustment reaction groups, and that
neither could differentiate between the anxiety and personal-
ality disorder, anxiety and adjustment reaction, and person-
ality disorder and adjustment reaction groups. Analysis of
variance of the mean MMPI D scale scores differentiated them
at the .01 level of significance, suggesting that it may be
a more sensitive measure for this purpose (Zung, 1965).

SDS ratings in normal individuals were found to have a mean of
33, whereas depressed individuals were found to have a mean in the
area of 64 to 74 depending upon whether or not they were hospitalized.
Anxiety reactions and other emotional disorders were found to have a
mean of 53.

The only difficulty experienced by the investigator with the use
of this depression scale was encountering several subjects who commented
that some of the questions never applied to them, and therefore felt an answer of 'little of the time' did not really describe their feelings. In general, however, the scale was convenient to use and did not occupy the subjects' time to the extent of having them become disinterested in the research project.

The Taylor Manifest Anxiety Scale (MAS) consists of 50 questions which were felt to be a satisfactory index of the intensity of anxiety. In two separate test-retest studies, the Pearson product-moment coefficients were .80 and .82, which provides some evidence of the reliability of the MAS (Taylor, 1953). The mean of a normal population on this is 14.56, and the mean of psychiatric patients is approximately 34.

The selection of this anxiety scale was based upon its reliability and popularity. This scale is widely used by clinicians and it is assumed that by design and definition it is a measure of anxiety. The use of this anxiety scale was found to be very convenient, easily administered, and expeditious. At no point throughout the study did any subject have difficulty in understanding the questions. In only a few instances was there ambivalence on behalf of the subjects as to how to answer a particular question.

Procedure

All subjects in this project were tested in a group of at least six subjects per session. The largest group tested during any single session was twelve subjects. All subjects for the project were instructed that this was a research project and that their involvement
would be on a voluntary basis. The following instructions were read to each group:

A research project is being conducted and it will take approximately twenty to thirty minutes of your time. Your cooperation in answering the following questions as fully and truthfully as possible will be appreciated. Your name is of no value to this project, so your identification will not be requested. At any time, if you have a question, do not hesitate to raise your hand. Once again, please answer all questions as completely as possible.

Once the subjects had completed the questionnaire and both tests, the examiner checked the pages of each to find if any questions were left unanswered. If specific questions were missed or incomplete, the examiner requested that the subject complete the answer. At no time did a subject refuse to cooperate.

After all subjects in every session had completed the tests and questionnaire; the forms were placed in a zippered case and remained anonymous. All subjects were thanked for their participation in the project.
RESULTS

The main purpose of the study was the investigation of the extent of depression and anxiety in adult male alcoholics in two separate environments: hospitalized and non-hospitalized. The plan was to compare the mean scores on the MAS and SDS to ascertain whether or not there was a statistically significant difference between the two alcoholic groups.

A "t" test analysis of the SDS and MAS mean scores for the two alcoholic groups is presented in Table 1. The hospitalized group of alcoholics has significantly higher scores on both SDS and MAS scales. The mean score of 51.34 on the SDS for the hospitalized group approximates the mean SDS index of 53 found in psychiatric disorders falling within the categories of anxiety reactions, personality disturbances, and other transient situational adjustment reactions. The mean score on the SDS by the non-hospitalized group was 42.02 and falls within the SDS mean index of 25 to 53 on normal individuals. According to Zung, ratings in excess of those for normals (mean = 33), and regardless of psychological disorder, may be interpreted to signify the presence of depression. Those scores approaching 53 and over are thought to indicate clinically significant depression. Consequently, both of the alcoholic groups presented evidence of depressive features, above the mean of that for normal controls, with the hospitalized group expressing clinically significant depression. The hospitalized group of alcoholics revealed
TABLE 1

A t Test Comparison
of SDS and MAS Mean Scores
of the Two Alcoholic Groups

<table>
<thead>
<tr>
<th>Groups</th>
<th>SDS</th>
<th>MAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospitalized</td>
<td>51.34</td>
<td>23.60</td>
</tr>
<tr>
<td>Non Hospitalized</td>
<td>42.02</td>
<td>18.96</td>
</tr>
</tbody>
</table>

| t                 | 4.46** | 2.17*  |

Note - N in each group = 50
* t is significant at the 5% level of confidence
** t is significant at the 1% level of confidence
significantly more depression than those alcoholics not hospitalized.

The MAS mean score for normal individuals is 14.5, and 34 for psychiatric patients. In respect to the alcoholic group which were not hospitalized, the mean was 18.96 and considered to be within normal limits. However, the hospitalized alcoholic group presented a mean of 23.6, which suggests excessive anxiety.

The difference in scores obtained on both the depression and anxiety scales between the two groups was significant as shown by the "t" test in Table 1. The hospitalized alcoholic indicated definite psychological problems with respect to these two emotional states, although the non-hospitalized alcoholic was not without depressive trends. The results lend consideration not only to these emotional states occurring to a much greater extent in alcoholics, but that the difference in environmental settings creates a significant contrast between the two groups in the degree of anxiety and depression.

On the other hand, questionnaire items 3 and 4 dealing with marital status and education presents evidence of the two alcoholic groups being unequal on these two variables. A chi-square analysis of the differences between the two alcoholic groups with respect to marital status resulted in a significant difference at the .01 level in favor of the non-hospitalized group. The difference between the alcoholic groups with respect to education was significant at the .001 level in favor of the non-hospitalized group.
DISCUSSION

The results of the present investigation underscore the importance of anxiety and depression in the personalities of both hospitalized and non-hospitalized alcoholics. Since both groups have higher scores on depression, and the hospitalized group on anxiety, than is expected in the normal population, perhaps they are alcoholics due to their discovery that depression and anxiety are reduced through the use of alcohol.

The ingestion of alcohol is sometimes referred to as a conditioning process whereby an individual obtains relief from anxiety and other negatively toned emotional states. The elimination of unpleasant psychological states is the reinforcement and the drinking becomes a process of conditioned behavior. Several studies have demonstrated the effectiveness of alcohol as an anxiety-reducer in rats and cats (Jellinek, 1960). In addition, Hoch and Zubin (1950) report on experiments in which alcohol, was administered intravenously to patients who showed anxiety.

The intravenous route eliminated the patient's recognition that he was receiving alcohol, and the otherwise inescapable influence of cultural attitudes. Aside from the expected euphoria the patients abreactively ventilated their anxieties, and surprisingly, many showed lasting improvement dating directly from the experiment. This is more pertinent in the light of the observation that either barbiturates or alcohol given immediately after terror-inspiring happenings, spared the individual the anxiety chain reaction common to large segments of the same population who went without such simple measures.

Even though an alcoholic is censured by his family, employer,
and friends, he may repeatedly turn to alcohol because the positive reinforcement, i.e., reduction of anxiety or depression, is stronger than the competing social punishment.

The significantly higher depression and anxiety scores in the hospitalized alcoholic in comparison to the non-hospitalized alcoholic could be attributed to the psychological effects of confinement and institutionalization. That is, the hospitalized alcoholic may experience increased anxiety and depression because of the loss of familiar surroundings, fear of what lies ahead, frustration over the regimented hospital environment and the social punishments that hospitalization often implies.

However, the difference on anxiety and depression might be related to the finding that the two groups are unequal on two important variables, education and marital status.

To conclude, the findings of the present study are consistent with other research that has pointed up the importance of depression and anxiety in the problem of alcoholism. Further research is needed (1) to control the variables of marital status and education, and (2) to assess the psychological effects of confinement and institutionalization during the treatment of the hospitalized alcoholic. Furthermore, it would seem advisable to compare hospitalized and non-hospitalized alcoholics on depression and anxiety at the time that the former group is admitted to the hospital.
A review of the literature on alcoholism indicated that anxiety and depression are significant factors in the characteristics of alcoholics. In view of the past research on depression and anxiety in alcoholism, the main interest of this investigation was to determine which emotion predominates in the non-hospitalized alcoholic versus the alcoholic who is hospitalized, and to determine if there was any difference between these emotions in alcoholics and that of a normal population.

It was expected that data from 50 cases in each of the two primary groups of alcoholics should give the investigator enough information to make some comparisons between hospitalized and non-hospitalized alcoholics. The SDS was used to measure the severity of depression. The MAS was used to measure the degree of anxiety. In order to secure supplemental information, a 20 item questionnaire was designed to obtain other factors relating to the alcoholism.

Analysis of data on the MAS and SDS indicated that depression and anxiety occur to a much greater extent in alcoholics than in the normal population. Furthermore, the hospitalized alcoholic evidenced more anxiety and depression than the non-hospitalized alcoholic.

One explanation of the significantly higher depression and anxiety scores in the hospitalized alcoholic in comparison to the non-hospitalized alcoholic could be the psychological effects of
confinement and institutionalization. Another explanation could be the fact that the two groups were not comparable on variables that might be related to anxiety and depression.
REFERENCES


APPENDIX A

Tables

Table A - A Comparison of Marital Status

<table>
<thead>
<tr>
<th>Category</th>
<th>Hospitalized</th>
<th>Non-Hospitalized</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>18%</td>
<td>6%</td>
</tr>
<tr>
<td>Married</td>
<td>30%</td>
<td>56%</td>
</tr>
<tr>
<td>Separated</td>
<td>16%</td>
<td>4%</td>
</tr>
<tr>
<td>Divorced</td>
<td>36%</td>
<td>34%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table B - A Comparison of Number of Children

<table>
<thead>
<tr>
<th>Group</th>
<th>No. of Children</th>
<th>Mean No. of Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospitalized</td>
<td>93</td>
<td>1.9</td>
</tr>
<tr>
<td>Non Hospitalized</td>
<td>125</td>
<td>2.5</td>
</tr>
<tr>
<td>Total</td>
<td>218</td>
<td>2.2</td>
</tr>
</tbody>
</table>
### Table C - A Comparison of Education

<table>
<thead>
<tr>
<th>Category</th>
<th>Hospitalized</th>
<th>Non-Hospitalized</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some Grammar</td>
<td>14%</td>
<td>4%</td>
</tr>
<tr>
<td>Grammar</td>
<td>10%</td>
<td>2%</td>
</tr>
<tr>
<td>Some High School</td>
<td>32%</td>
<td>12%</td>
</tr>
<tr>
<td>High School</td>
<td>30%</td>
<td>36%</td>
</tr>
<tr>
<td>Some College</td>
<td>12%</td>
<td>30%</td>
</tr>
<tr>
<td>College</td>
<td>2%</td>
<td>12%</td>
</tr>
<tr>
<td>College - Some Graduate School</td>
<td>0%</td>
<td>4%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

### Table D - A Comparison of Military Service

<table>
<thead>
<tr>
<th>Category</th>
<th>Hospitalized</th>
<th>Non-Hospitalized</th>
</tr>
</thead>
<tbody>
<tr>
<td>Army</td>
<td>54%</td>
<td>40%</td>
</tr>
<tr>
<td>Navy</td>
<td>20%</td>
<td>16%</td>
</tr>
<tr>
<td>Air Force</td>
<td>16%</td>
<td>8%</td>
</tr>
<tr>
<td>Marines</td>
<td>2%</td>
<td>8%</td>
</tr>
<tr>
<td>Other</td>
<td>2%</td>
<td>18%</td>
</tr>
<tr>
<td>None</td>
<td>6%</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>
Table E - A Comparison of Age and Length of Drinking Problem

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean of age of beginning of drinking problem (years)</th>
<th>Mean of length of drinking problem (years)</th>
<th>Mean of present age (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospitalized</td>
<td>35.16</td>
<td>11.68</td>
<td>46.58</td>
</tr>
<tr>
<td>Non Hospitalized</td>
<td>29.42</td>
<td>16.52</td>
<td>44.46</td>
</tr>
<tr>
<td>Total</td>
<td>32.29</td>
<td>14.10</td>
<td>45.52</td>
</tr>
</tbody>
</table>

Table F - A Comparison of Previous Periods of Hospitalization

<table>
<thead>
<tr>
<th>Group</th>
<th>Previous Hospitalization</th>
<th>No Previous Hospitalization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospitalized</td>
<td>48%</td>
<td>52%</td>
</tr>
<tr>
<td>Non Hospitalized</td>
<td>58%</td>
<td>42%</td>
</tr>
<tr>
<td>Total</td>
<td>106%</td>
<td>94%</td>
</tr>
</tbody>
</table>
Table G - A Comparison of Attitudes Toward the Drinking Problem

<table>
<thead>
<tr>
<th>Item</th>
<th>Hospitalized</th>
<th>Non-Hospitalized</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you have a problem with alcohol</td>
<td>50 0 0</td>
<td>48 2 0</td>
</tr>
<tr>
<td>Do you feel your family and relatives understand your drinking problem</td>
<td>22 28 0</td>
<td>33 17 0</td>
</tr>
<tr>
<td>Do you want to give up alcohol</td>
<td>46 2 2</td>
<td>47 2 1</td>
</tr>
</tbody>
</table>

Table H - A Comparison of Attitudes in Overcoming the Alcoholic Problem *

<table>
<thead>
<tr>
<th>Group</th>
<th>Excellent</th>
<th>Good</th>
<th>Not Good</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospitalized</td>
<td>20</td>
<td>26</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Non Hospitalized</td>
<td>28</td>
<td>20</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

* Item no. 17 in the questionnaire, "If you have a drinking problem, do you feel the chances of overcoming this problem are: 1) excellent, 2) good, 3) not good, and 4) poor."
APPENDIX B

Questionnaire

1. Age ____

2. Birthdate ____

3. Marital Status: (Check one)
   a. Single  
   b. Married  
   c. Divorced  
   d. Separated  
   e. Widowed  
   f. Other ____

4. Education: (Check one)
   a. One to four years grammar ____
   b. Five to seven years grammar ____
   c. Completed grammar ____
   d. Some high school ____
   e. Completed high school ____
   f. Some college ____
   g. Completed college ____
   h. Some graduate school ____

5. Military Service: (Check one)
   a. Army ____
   b. Navy ____
   c. Air Force ____
   d. Marines ____
   e. Other ____

6. Occupation ___________________________ Salary $____________

7. If married, is wife employed: (Check one)
   yes __ no ___

8. Family size: (Fill in)
   Number of sons ____
   Number of daughters ____

9. Do you have a problem with alcohol: (Check one)
   No ____
   Yes ____ If so, how long have you had a drinking problem ____

10. At what age did you begin drinking socially ____

11. Do you feel your family and relatives understand your drinking problem: (Check one)
    No ____ Yes ____

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12. Have you ever attended Alcoholics Anonymous: (Check one)
   No ___  Yes ___ If so, for how long ___  Are you still attending ___

13. If you feel you have a drinking problem, at what age did your drinking become a problem to you ________

14. Have you ever been to the Alcoholic Information Center in Kalamazoo: (Check one)
   No ___  Yes ___ If so, for how long ___  Are you still attending ___

15. Have you ever been hospitalized for a drinking problem: (Check one)
   No ___  Yes ___ If so, where have you been hospitalized: (Use one line for each separate admission to the same hospital)
   (1) ___________________ length of stay _______
   (2) ___________________ length of stay _______
   (3) ___________________ length of stay _______
   (4) ___________________ length of stay _______
   (5) ___________________ length of stay _______

16. Are you presently receiving any other professional treatment for a drinking problem: (Check one)
   No ___  Yes ___ If so, what type of treatment: (Name of agency, doctor, etc.)
   (1) ___________________
   (2) ___________________

17. If you have a drinking problem, do you feel the chances of overcoming this problem are: (Check one)
   Excellent ___  Good ___  Not Good ___  Poor ___

18. Do you feel you are being helped with your drinking problem: (Check one)  No ___  Yes ___

19. Do you want to give up alcohol: (Check one)  No ___  Yes ___

20. Why did you drink?

________________________________________________________________________