

# Sexual Dysfunction and Treatment in Alcoholic Women

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*ABSTRACT:* Female in-patients at an alcoholic rehabilitation center and a half-way house were evaluated in terms of their sexual functioning. They were then given an opportunity to participate in a 12 session sexual enhancement program including components of sex education, sexual awareness, sexual dysfunction, and sexual assertiveness. Both subjective and objective data suggest that such a program can be very beneficial.

The role of alcohol in human sexual functioning is one fraught with myths and lacking in data. As pointed out by many investigators the Shakespearean quote "Lechery sir, it provokes, and unprovokes the desire but it takes away the performance" is still considered the seminal publication in the area.

This state of affairs is beginning to improve in terms of the relationship between male sexual arousal and alcohol. For example, recent biochemical data have found decreases in testosterone levels with increases in alcohol dose.<sup>1-3</sup> In addition Wilson and his colleagues<sup>4,5</sup> employing objective recordings of penile tumescence have found decreases in erection responses to sexual stimuli with increasing doses of alcohol. These findings were similar in alcoholic and non-alcoholic males.

However, when attention is turned to females, Carpenter and Armenti's<sup>6</sup> 1971 statement that "most experts comment on human sexual behavior and alcohol as though only males drink and have sexual interests" is still an accurate reflection of the state of the literature. The seriousness of this

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deficit in data is compounded by the recognition of increasing problems of alcohol abuse in females.<sup>9</sup>

The limited literature available relevant to the current investigation falls in two interrelated areas. The first area concerns the direct effect of alcohol on sexual arousal in females and the second concerns problems in sexual functioning of females diagnosed as alcoholic.

Three studies were found relating alcohol intake to female sexuality. In the first, Wilsnack<sup>10</sup> examined the effect alcohol intake had on the sexual fantasies as measured by the Thematic Apperception Test (TAT) in a non-alcoholic sample of women. The results of the studies were interpreted to suggest that females drink to "feel more womanly". The study has numerous methodological problems, the most obvious being the reliability and validity of the TAT as a dependent variable.<sup>3</sup> Two more recent studies<sup>11,12</sup> with improved design and methodology have investigated the effect of alcohol on female sexual arousal using the more objective vaginal photo-plethysmograph, a measure of blood flow to the vagina. Results of these studies have shown a decrease in vaginal blood flow with alcohol intake in a dose dependent fashion. Interestingly, although physiologically subjects evidence decreased sexual arousal with increased alcohol consumption, their self report indicated increased arousal with increased subjective estimates of intoxication. This suggests some dissociation between the cognitive and physiological components of female sexual arousal that was not found in males.<sup>3</sup> It should be noted that these studies employed nonalcoholic controls and whether the results would be similar for alcoholic women is yet to be determined.

A second line of evidence relating alcohol and sexual difficulty comes from clinical reports suggesting sexual problems in samples of alcoholic women. Levine<sup>1</sup> for example, in studying the case records of sixteen female alcoholics found that eight reported difficulties having orgasms, seven expressed no interest in men sexually, and one was a virgin. Curran<sup>13</sup> in an early investigation found that of a sample of fifty alcoholic women, sixteen reported being "frigid" and five reported infrequent orgasms. A similar high percentage of "frigidity" was also found by Kinsey<sup>14</sup> (71.7 percent) although Lemere and Smith<sup>15</sup> reported few if any of their female patients (no numbers given) were sexually inadequate.

Overall the limited data suggest that alcoholic women do have high rates of sexual problems although this is not found in all studies. The data to date has, however, frequently focused on the ability to orgasm while other possible sexual dysfunctions (vaginismus, dyspareunia, lack of arousal) have received little attention. Since some of the physiological consequences of alcohol abuse such as cirrhosis of the liver can lead to decreased interest in sexual activity and dyspareunia secondary to atrophy of vaginal

mucosa<sup>16</sup>, data is needed in terms of the frequency of various sexual dysfunctions in female alcoholics. The first portion of the present investigation provides this type of data.

The second purpose of the paper is to describe and present preliminary results from a small group of alcoholic women participating in a sexual enhancement group. Given the frequency of sexual problems presented in the literature for alcoholic women it is surprising that little data is available on possible treatment strategies directed at this important aspect of human functioning. This lack is especially noteworthy given the increased focus on sexual dysfunction treatment for non-alcoholic individuals.<sup>17,18,19</sup> Hopefully the program description given in this report will serve as an impetus for the development of other programs in alcoholic treatment facilities.

## METHODS

### *Subjects*

The patients in the present study were females age 16 to 69 ( $x=37.9$ ). The majority of patients were in-patients on an Alcohol Treatment Unit and were involved in an overall project looking at a variety of treatments for alcoholic women. A smaller percentage (28 percent) were alcoholic women currently residing in a half-way house. All hospitalized patients had completed a stay on the detoxification unit prior to participation in the present project and all subjects were considered medically detoxified. The rules of the half-way house prohibited women from drinking actively while living there. To the best of our knowledge no women in the project were drinking while participating in either the initial assessment or the treatment. In addition to participation in the human sexuality program, the subjects received other treatments including assertiveness training, group therapy, individual counseling, and psychotropic medication where appropriate. The usual stay on the in-patient program was thirty days.

### *Initial Data Collection*

Upon transfer to the active treatment unit or admittance to the half-way house, subjects were seen by one of the present investigators (the majority by C. S.) for the taking of a structured sexual history. The purpose of the history was to determine the percentage of subjects experiencing various sexual problems.

In addition to the structured interview, subjects completed the following paper and pencil tests: (a) Partner Happiness Scale (patterned after the

Marital Happiness Scale<sup>20</sup>), (b) Communication Effectiveness Scale<sup>21</sup>, (c) Sexual Arousability Inventory (SAI)<sup>22</sup>, and (d) Sex Education Test. Women also completed a sexual attitude scale which is not presented in the present paper as it is still undergoing factor analytic work to determine some basic psychometric properties. For information regarding the first three scales the reader is referred to the appropriate references. The Sex Education Test is an eleven item quick screening multiple choice questionnaire designed specifically for this project. Unless otherwise noted, 74 women completed the initial assessment portion of this study.

### *Sexual Enhancement Group*

Upon completion of the interview and testing, subjects were given the opportunity to participate in the sexual enhancement group. The goals for this group included the following:

1. increased knowledge of sexuality
2. increased acceptance of and confidence in personal sexuality
3. increased comfort in and ability to communicate about sex
4. improved body image and awareness
5. knowledge and, if relevant, implementation of suggestions for sexual dysfunctions

The group consisted of twelve one-and-a-half-hour sessions, initially conducted three times a week for four weeks. Because of scheduling difficulties due to the usual 30 day limit on the alcohol unit, the sexual enhancement group was later run every day and finished in two-and-a-half weeks. Regardless of spacing of the groups, the general outline of each session was similar. The groups consisted of four to twelve members and two leaders. Sometimes the group leaders were both female; sometimes one was female and the other male. The group leaders introduced specific exercises and topics, served as time-keepers and generally facilitated the group. However, it was emphasized that the greatest source of learning was the sharing of experiences with each other. The leaders themselves often self disclosed information, sometimes obscuring the line between participant and leader.

Initial group sessions were more structured, usually involving informal lectures by the group leaders. These initial sessions called for less self disclosure on the part of the group members. As the group progressed, the group leaders usually talked less as the group members became more comfortable and trusting, interacted more with each other and volunteered personal information.

The outline of the group could roughly be divided into four stages: sex

education, sexual awareness, sexual dysfunctions, and sexual assertiveness. After the initial session which involved introductions of leaders and members, discussion of confidentiality issues, and exploration of individual expectations for the group, the first phase, sex education, was initiated. The group leaders presented information on female and male anatomy and sexual response, effects of alcohol and aging on sexual response, and common sexual myths and fallacies, etc. Films, slides, various exercises, and role-plays by the leaders were used to present this information. Questions and comments by the group members were encouraged. At this point, however, much of the discussion centered on societal hang-ups and "others" problems rather than dealing with personal issues.

In the second phase of the group, sexual awareness was explored. Various body work exercises and relaxation exercises were employed. The group members were asked to remember past sexual/sensual experiences by taking a "sexual journey", encouraged to recognize the impact of the media on self image by looking through magazine advertisements, and to pay attention to all their senses through the "sensuous objects" exercise. Focus here centered on self-awareness rather than didactic information giving.

By the third phase, group members were feeling more comfortable both with each other and with sexual topics. Therefore, group members were asked what they'd like to change about themselves sexually or their relationships. Individual goals were restated with resultant tailored treatment programs. Specific suggestions for female and male dysfunctions were provided. The final phase, sexual assertiveness, was an extension of this focus on individual sexual concerns. Progress of each member was followed in each subsequent session with both leaders and members offering support, suggestions and reinforcement for improvements. For those members not hampered by any specific sexual dysfunctions, concerns and goals typically involved enhancement of current relationships, ways to meet potential partners, and enjoyment of sexuality through masturbation.

Twenty-three women completed at least eight of twelve sessions. There were numerous reasons women failed to complete the group and these include refusal to volunteer for the project, discharge prior to completing an adequate number of sessions, and going AWOL during their stay on the unit.

## RESULTS

### *Subject Characteristics*

Table I presents some demographic information on the current sample. As mentioned previously, the mean age was 37.9 years. The majority of the

Table 1  
Demographic Information

Marital Status (n=74)	%
Married	17.6
Divorced or Separated	51.4
Widowed	6.8
Single	24.3
Education (n=74)	
<8	2.7
8-12	67.6
College Graduate	16.2
College Graduate	13.5
Race (n=74)	
Caucasian	77
Black	20.3
Other	2.7

sample (77 percent) were white and the majority were currently not married (82.4 percent). In terms of educational level the majority of our subjects were high school educated or less. Overall the sample was a lower middle class predominantly white group. The mean number of years drinking for the 65 women whose data was retrievable was 8.78 (s.d.=6.49).

### *Initial Questionnaire Results*

Table 2 shows the mean and range of scores for the four initial self report questionnaires administered. The mean score for the SAI falls in the 35th percentile. The mean of the Partner Happiness Scale was 6.26. This scale has possible values from 1 to 10. This score of 6.26 is a slightly higher level of partner happiness than reported by the original authors for their distressed couples, but the mean is lower than that for the same couples after treatment. However, no data is available on this scale for a normal group. The Communication Effectiveness Scale showed a mean of 2.16. The maximum score is a 5 and the minimum a 1 with the mean being 3. Therefore, it appears that our sample was slightly below average in their ability to communicate effectively their sexual needs. The Sex Education Test showed a mean of 67 percent correct responses.

Table 2  
Pre-Test Inventory Scores

	$\bar{X}$	Range	N
Sexual Arousal Inventory	77.48	-13-124	66
Sex Education Test	67 <sup>a</sup>	14-89	67
Partner Happiness Scale	6.26	1-9.5	52
Communication Effectiveness Scale	2.16	1.1-3.6	51
a % correct			

### *Frequency of Sexual Dysfunction*

Table 3 lists the frequency of sexual activity among this group while Table 4 lists the frequency of specific sexual dysfunctions, and the patient's satisfaction with their sexual behavior. It should be noted that across areas the number of subjects that are inactive changes although the overall sample size remains constant. We are unable to explain this discrepancy although it appears that some subjects changed their reports of inactivity at some point throughout the interview and this was not picked up by the examiner until the data was summarized. For that reason we have left the reported frequency under each dysfunction since the discrepancy was minor. In terms of frequency of intercourse, one of the most interesting points is that 23 of the 74 subjects reported that they had had no sexual intercourse in the past six months. This may reflect some sexual or interpersonal difficulties in alcoholic women or it may be a reflection of the large number of women who were unmarried at the time of this project. In terms of an alternative sexual behavior, the second portion of Table 3 lists the number of women who have masturbated in the past, the number of women who are currently masturbating, and their frequency of masturbation. As can be seen, it appears that masturbation is not a frequent sexual outlet in this population if the self report data accurately reflects the patient's sexual behavior.

In terms of specific sexual dysfunction, Table 4 lists five possible areas of dysfunction including: (a) frequency of orgasm, (b) difficulties in sexual arousal, (c) dyspareunia, (d) vaginismus, and (e) sexual desire. Twenty-one of 74 women (28.4 percent) report orgasm less than 50 percent of the time during sexual activity with a partner. Of those individuals who are sexually active (i.e. those with sexual activity with a partner in the last six months)

Table 3  
Frequency of Sexual Activity

	%
Masturbation (n=74)	
Never	41
Stopped	35
At least weekly	15
At least monthly	7
Less than monthly	1
Intercourse per year (n=74)	
> 150	28
100-150	12
50-100	12
12	14
< 1	1
0	31

very few report problems of sexual arousal during sexual activity or problems with dyspareunia or vaginismus. However, a larger percentage (29.7 percent) report little or no sexual desire. This seems to be consistent with the percentage of women who are inactive sexually. When subjects were asked to rate whether they considered themselves to have a problem with their sexual response only 14 of the 74 women answered yes. However, a larger percentage reported dissatisfaction with their current sexual situation. Much of this dissatisfaction was related to lack of adequate sexual partners or difficulties in nonsexual aspects of their relationship with their partners.

Overall, alcoholic women did not report a frequency of sexual problems greater than that reported in a non-clinical sample<sup>21</sup> although this data is based on patients' self report. There are reasons to believe that the figures we present are an underestimate of the extent of sexual problems in an alcoholic sample and this will be discussed further in a later section of the paper.

#### *Effect of Alcohol on Sexuality*

We also asked some of our subjects to rate how alcohol affects their sexual arousal (n=49) and how alcohol affects their sexual performance

( $n=48$ ) on a  $-3$  to a  $+3$  scale. The results seem to be bimodally distributed. In terms of affect on sexual arousal, 40.8 percent of the subjects rated it in a negative direction ( $-1$  or less) while 48.9 percent rated it in a positive direction. The remaining subjects reported no effect. Similar data were available for sexual performance with 35.4 percent rating in a negative direction, 45.8 percent rating in a positive direction and the remaining nine subjects (18.8 percent) stating that alcohol had no effect on sexual performance.

### *Other Relevant Findings*

As we began interviewing alcoholic women we became aware that a large number reported being the victims of aggressive sexual acts. Although this was not originally a portion of the structured interview we added it as our awareness of the problem arose. In the 48 women whose data were available, 54 percent reported being the victims of rape either as an adult or as a child. This percentage of over one-half of the women is much higher than would be expected in a nonclinical sample even given the under reporting of rape. In addition to sexual abuse we also found that in a sample of 44 women who were asked, 58 percent had been abused physically by males. It would appear that in this group of women a large percentage have been victims of aggression from males. Given this learning history it would be expected that these women would have difficulties relating to males both sexually and nonsexually. In fact for them not to have such difficulties would be unusual.

### *Results from the Sexual Enhancement Group*

Table 5 shows the pre-post scores for the 23 women who completed at least 8 sessions of the sexual enhancement groups. Data from only 16 women are available for the Partner Happiness Scale and data from only 19 women for the Communications Effectiveness Scale. As can be seen from Table 5, the Sexual Arousal Inventory, Sex Education Test and Partner Happiness Scale showed significant improvements from pre-test to post-test. Although there was a slight change in communication effectiveness, this was not significant. In terms of the comparison of the individuals who completed the group versus those who did not, the pre-test scores of those who completed the group are quite similar to the overall scores on the pre-test for the total sample of 74 except the Partner Happiness Scale which is lower for those completing the group. This suggests that the samples were similar except that there may have been more partner discord among the patients who volunteered and completed the group than those who did not.

Table 4

% of Patients Displaying Various Sexual Dysfunctions  
and Patients' Report of Sexual Satisfaction

Ability to Orgasm (n=74)		Sexual Desire (n=74)		%
75-100%	54	At least 4x month	70.2	
50-74%	18.6	Little or none	28.4	
25-49%	13.5	None	1.4	
< 25%	14.9			
Sexual Arousal in Sexual Interaction (n=74)		Do You Consider Sexual Response a Problem (n=74)		
30-100%	50	Yes	18.9	
50-79%	10.8	No	81.1	
1-49%	5.4			
0%	4			
Inactive	28.4			
Dyspareunia (n=73)		Satisfaction with Current Sexual Satisfaction (n=73)		
None	60.2	1 (very dissatisfied)	21.9	
< 50%	9.6	2	2.7	
> 50%	4.1	3	9.6	
Inactive	26	4	8.2	
		5	26	
		6	13.7	
Vaginismus (n=74)		7 (very satisfied)	17.8	
None	66.2			
< 50%	6.8			
> 50%	1.4			
Inactive	25.7			

Table 5

## Pre- and Post Group Means: Inventory Data

	PRE	POST	t	DF
Marital Happiness Scale	5.15	6.46	2.843*	15
Communication Effectiveness Scale	2.32	2.42	1.073	18
Sexual Arousability Inventory (SAI)	75.83	93.82 <sup>b</sup>	2.586*	22
Sex Education Test	67.91	80.00	3.591**	22

<sup>a</sup>This score is at the 35th percentile of a normative group<sup>22</sup>

<sup>b</sup>This score is at the 65th percentile<sup>22</sup>

\* $p < .05$

\*\* $p < .01$

These results (pre-post changes) are encouraging given the limited number of treatment sessions and the lack of opportunity for many of the hospitalized patients to practice their new found skills for any length of time. The majority of patients did have weekend passes but this gave them limited opportunities to implement their skills and gave the group leaders limited time to assist the patients in problems that arose when the patients moved from the group to their home environment.

## DISCUSSION

The current data is somewhat inconsistent with previous reports of sexual dysfunction in alcoholic women. The percentage of non-orgasmia and other sexual dysfunctions in this group was lower than that presented by either Curran,<sup>1</sup> Levine,<sup>2</sup> or Kinsey,<sup>11</sup> although it apparently is a higher percentage than that reported by Lemere and Smith.<sup>12</sup> The reasons for this discrepancy are not clear although a number of hypotheses could be proposed. Apparently our sample did not differ a great deal in terms of age or history of drinking than the previous samples studied. However, a major difference may be the time at which the data was collected. The data compiled by Kinsey which is the latest study cited in this investigation was collected in 1960. It could be that societal changes in the 19 years since that

time could lead to a reduction in sexual problems of female alcoholics. A second relevant factor when comparing these results to those of Curran<sup>13</sup> is that his sample was chosen to include cases that mainly displayed alcoholic hallucinosis. This might suggest that his sample was a more severely disturbed sample psychologically or one where alcohol had had more of an organic effect by the time the patients were studied.

Another factor that must be considered is the lack of clear definitions of sexual disorders in the previous investigations. Most used the outdated term, frigidity whose meaning in terms of type of sexual dysfunction is unclear. In looking at our own data, we could increase the number of people called dysfunctional by assuming that all women who experienced orgasm less than 75 percent of the time during intercourse suffered a sexual problem. However, this seems to be inconsistent with the normative data presented by Hite.<sup>25</sup>

Although these discrepancies may explain the current data, further difficulties arise when one looks at the frequency of sexual dysfunctions in nonclinical women.<sup>21</sup> In a survey of married couples, Frank et al. found an extremely high percentage of women who had difficulties becoming aroused (48 percent) and difficulties reaching orgasm (46 percent). Again there was no clear explanation of what operational definition was given to difficulty. This does suggest that in future studies one needs to more clearly define what one means by sexual dysfunction. In the current paper we have tried to present our data as percentages of times when the problem occurs which allows other investigators to use their own cutoffs for defining dysfunctional sexual behavior.

A final problem with the current data is that the data is based on patient self report. We have some reasons to believe that the percentage of problems reported by our sample was not consistent with the actual extent of problems in this population. One indication of this comes from a comparison of the patient's score on the SAI with the patient's self report. The SAI, a standardized instrument of sexual arousability, suggested that as a group these patients fell in the 35th percentile. However, when patients were asked specifically about frequency of sexual problems, there was no indication of this severe an extent of the problem. A second line of evidence comes from the experience of the therapists during the sexual enhancement groups. It was observed in many instances that as the women became more comfortable talking about sexuality, many problems were revealed that were not revealed in the initial evaluation. Many patients reported problems in communicating their needs to their partners which led to a good deal of sexual dissatisfaction. It was the feeling of the group leaders

that many of these women, many more than reported so during the initial interview, had definite sexual dysfunctions that needed treatment. However, even with this discrepancy it is doubtful that the percentage of problems is as high as presented by other authors such as Kinsey. It seems important that in future studies with disabled populations, attempts be made to quantify the extent of dysfunction in various areas rather than using terms with other connotations such as frigid and nonfrigid.

A second aspect of this investigation is the value of a sexual enhancement group on an alcohol and drug unit. Initially we had planned only to provide sexual dysfunction treatment to those women who reported specific sexual dysfunctions. However, as we began the initial interviews, we realized that there were not enough subjects reporting dysfunctions to justify a group devoted just to this topic. For that reason we chose a sexual enhancement model that would be appropriate for those with or without specific dysfunctions. We think that this decision was correct and one that should be considered by other alcohol treatment facilities. The reaction by women who were in the group, although initially apprehensive, was overwhelmingly favorable to the group experience. Comments by most of the women indicated that the major problems with the group were that it was too short and that an advanced group was needed.

Although the overall reaction was extremely positive, there are some problems that other therapists should be aware of in running such a group on a unit. The first problem is one of logistics and one of limited stay. Because the current therapists were limited to the patient's 30 day stay it was necessary for us to run our groups daily to ensure that all women could complete the group. Even with this mass treatment, many women were discharged prior to completing the group. On some occasions, this left only four patients by the end of a twelve session group. For other therapists beginning such a group it would be important to try to arrange for patients to stay on the unit until completion of the group or for patients to return to the unit on an out-patient basis to continue their treatment. Therapists running such groups should also try to arrange for appropriate follow-up or follow-up groups to assist the patients as they apply some of the skills they have learned in their natural environment. We are in the process of following our subjects over a longer period of time.

Another problem that arose in running this group concerned patients who were dissatisfied. Of the patients seen, there were approximately three patients who reacted negatively to the group. However, these patients became detrimental in their communications to new patients coming on the unit. This led to many of the in-patients refusing to participate in this

voluntary group. We feel it would be advisable when these types of negative communication patterns arise in an in-patient setting for the therapists to meet with new patients to deal with their possible concerns about the sexual enhancement group and possibly have the new patients meet with other patients who have found the group to be more rewarding. Also, future studies need to be directed toward determining which patients have a negative reaction to such a sexual enhancement group experience. Too often as therapists we tend to write off our treatment failures rather than determine what variables led to the failure and what other treatment approaches might be used to avoid future failures.

Other findings noted in this study were the high percentage of women who were the victims of sexual aggression and physical aggression from males. Given the information we now have it is probably important to include in a sexual enhancement group some opportunity for women to express their feelings about the group and its subsequent effects on their social-sexual relationships.

Another factor to be considered is whether a male should be a co-therapist in this type of group. Although the majority of patients in this study were seen by female co-therapists, one of the groups was led by a male-female co-therapy team. The overall evaluation of this male-female co-therapy team was positive. However, because of the small sample we cannot generalize regarding whether this is the best therapeutic approach. Women who have completed the group have been questioned regarding whether they would have liked a male co-therapist and the data is fairly evenly split. Half the women feel that they would have been inhibited by a male and that this may have interfered with the group process. Approximately another half of the women felt that although they would have been initially inhibited, a male therapist would have provided an opportunity to see things from the "male side". Further research is needed in this area and we plan in the future to investigate more thoroughly differences in the results of patients seen by female therapy teams versus male-female therapy teams.

Overall both our subjective and objective data suggest that a sexual enhancement group can be a valuable component of an alcohol and drug treatment unit. Although there are a number of problems left to be answered concerning the extent of sexual problems in alcoholic women and whether this is psychologically based or physiologically based, our experience suggests that women respond favorably to a sexual enhancement program. It would be valuable for other facilities to begin such programs. Attempts to evaluate the extent of problems encountered and the effective-

ness of a sex enhancement group on an alcohol treatment unit would provide further data on the reliability of the current findings.

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*Daniel Grant*

SIGNATURE AND TITLE OF EDITOR OR GENERAL BUSINESS MANAGER OR OWNER  
*Daniel Grant*

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