Suicide Risk among Women with Alcohol Problems

EDITH S. LISANSKY GOMBERG, PhD

Abstract: The current study compares 301 alcoholic women, ages 20 to 50, interviewed in 21 treatment facilities, and a control group of nonalcoholic women matched for age and socioeconomic status of family of origin. A significantly higher percentage of alcoholic women (40.0% vs 8.8%) reported having made suicide attempts, a difference of 31.2 percentage points (95% CI = 23.9, 38.5). Age comparisons within the alcoholic sample show the percentage of younger alcoholic women attempting suicide to be twice as great as the percentage of the alcoholic women suicide attempters in their forties. Such age differences were not found among the nonalcoholic control group. The findings suggest that youthfulness and alcohol/drug abuse are the critical combination for high risk. Awareness of the suicide attempt risk potential is necessary both for emergency room personnel and for substance abuse facility workers. (Am J Public Health 1989; 79:1363-1365.)

Introduction

Almost a century ago, Durkheim’s classic work on suicide pointed out that more men than women committed suicide, but that suicide attempts were more frequent among women.1 There have been attempts to explain this gender difference in terms of sex roles and cultural attitudes.2-4 Durkheim also noted the relation between suicide and alcoholism and, indeed, suicide is one of the more frequent causes of death among alcoholics.5-8 This relationship between alcoholism and suicide has been related to depression and other psychiatric disorders, to erosion of social networks, and to disrupted interpersonal relationships.9-12

Similar male:female patterns of completed suicide and suicide attempts seem to prevail among alcoholic persons.13-16 Goodwin concluded that there was an association between alcoholism and suicide among White male alcoholics during the middle years of life, whereas, “... attempters generally are younger and are more likely to be women...”17

A review of the epidemiology of suicide attempts18 shows the risk years to be the twenties and the same review showed more female than male attempters in the countries and time periods studied. A recent analysis of male and female suicide rates18 found completed suicide rates are significantly higher for men.

Suicide rates are high among both male and female alcoholics. A recent study of predictors of mortality among women alcoholics found significantly higher mortality for alcoholic women than for the general population of women; “accidents and violence” accounted for 26 percent of the deaths, ranking second as the cause of death in the alcoholic sample.19 There are few studies of suicide attempts by alcoholics, by women alcoholics, or by women alcoholics of different ages. We studied suicide attempts in alcoholic and nonalcoholic women by age group.

Methods

Three hundred and one White women, admitted to 21 alcoholism treatment facilities in Michigan, completed a one-to-two-week period of detoxification and were then interviewed by trained female interviewers of the Field Office, Institute for Social Research, University of Michigan.

The 21 facilities included inpatient, outpatient, small town, and urban facilities, and the women were referred to the facility by self, physician, family member, the court, friends, etc. All consecutive admissions between the ages of 20 and 50 were asked to participate; refusal rate was 7 percent. All respondents were White because available evidence indicates differences in age, drinking patterns, and alcohol-related problems when White and Black alcoholic women are compared.20 Age at onset was, inevitably, related to current chronological age, i.e., alcoholic women in their twenties had a mean age at onset of 19.58 years (standard deviation = 3.18); alcoholic women in their thirties reported their mean age at onset as 28.34 years (standard deviation = 5.35); and the alcoholic women in their forties reported mean age at onset as 36.52 years (standard deviation = 5.93).

When 200 of the 301 women in the alcoholic sample had been interviewed, the demographic information was evaluated in order to obtain a nonalcoholic sample of women approximately matched on socioeconomic status. The control women were White, between 20 and 50 years of age, and approximately of the same social class as the alcoholic women. They were selected by nomination; the alcoholic women who remained to be interviewed (100) and women in the local chapters of Alcoholics Anonymous and Women in Sobriety were asked to give the name of an acquaintance or neighbor who was not alcoholic. Refusal rate of the nominated women was the same as that of women in treatment; when funding was terminated, interviews had been completed with 34 nonalcoholic women in their twenties, 53 in their thirties, and 50 in their forties. Of these 137 control women, none had ever needed a drink before breakfast and none had ever sought help because of their drinking, three had gotten into trouble at school, one had been arrested for driving under the influence, and one reported that she had “neglected obligations” for two days. Two said that they had once “wanted to stop drinking but couldn’t.” As a group, however, they were nonalcoholic.

The economic status of family of origin and the white/blue collar status of respondents’ parents were similar in the alcoholic and nonalcoholic groups.21 The control group was also compared with a random sample of women interviewed in an earlier, national survey.22 When women between the ages of 20 and 50 from the national sample were compared with the present control group on items dealing with psychiatric symptomatology, no significant differences were apparent.*

Address reprint requests to Edith S. Lisansky Gomberg, PhD, Professor, School of Social Work, and Professor of Psychology, Alcohol Research Center, Department of Psychiatry, School of Medicine, University of Michigan, 2091 Frieze Building, Ann Arbor, MI 48109-1285. This paper, submitted to the Journal May 10, 1988, was revised and accepted for publication March 21, 1989.

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*Data available on request to author.
The standardized interview schedule include items dealing with demographics; early family experience; drinking history; marital, parenting and employment experience; health; social supports; pregnancies; drug usage; and psychiatric symptomatology. The interview was composed of items culled from several alcoholism study interviews in the Connors Collection of the Rutgers Center of Alcohol Studies, from the Diagnostic Interview Schedule (DIS) of the National Institute on Mental Health, from the Center on Epidemiological Studies Depression Scale (CES-D), and from several earlier surveys conducted at the Institute for Social Research. After field-testing and revising, the interview schedule was reviewed by a panel of three clinicians and a panel of three recovered alcoholic women.21

Although alcoholic and nonalcoholic women were matched for age and for socioeconomic status of family of origin, the alcoholic women reported more behavioral, emotional and impulse control problems in childhood and adolescence.21,22 There are significant differences between the two groups of women in educational achievement, marital history and marital status, and occupational level.21

Results

The difference between alcoholic and nonalcoholic women in the proportion reporting any suicide attempt is striking: 40.0% versus 8.8%, a difference of 31.2 percentage points (95% CI = 23.7, 38.5) (Table 1).

Among alcoholic women, suicide attempts were twice as common at ages 20-29 as at ages 40-49. The same age differences, however, did not appear in the nonalcoholic sample. These results do not support the idea that younger women in general are at more risk for suicide attempts than women of other ages.

When the women were interviewed, they were asked about the use of substances other than alcohol, and the alcoholic women reported significantly more often that they had used or were currently using nicotine, prescribed drugs, and banned substances (Table 2). Those who had made suicide attempts were also more likely to have used any of the drug substances asked about. There were too few nonalcoholic women who reported a suicide attempt (N = 12) for meaningful comparisons; it is of interest that those who have made a suicide attempt are also more likely to be users of Valium and sedatives.

Among alcoholic women, there was a clear difference in the reported psychiatric symptoms of suicide attempters and nonattempters. Those alcoholic women who have made suicide attempts also reported significantly more tension, indecisiveness, anxiety and nervousness (Table 2). The report on psychosomatic symptoms was mixed: attempters report more dizziness, hand trembling, and headaches than nonattempters but there is little difference between the two groups in loss of appetite, upset stomach, shortness of breath, hives, or sweating hands.

There was a positive but not strong relation between paternal alcoholism and suicide attempts. Of the alcoholic women who made at least one suicide attempt, 63 percent reported a problem-drinking father; among the nonattempters it was 48 percent. Among the nonalcoholic women, 73 percent of attempters reported having had a problem-drinking father; among nonattempters, it was 28 percent. Among the alcoholic women having an older sibling who was a heavy or problem drinker while the respondent was growing up differentiated between those who made at least one suicide attempt and those who did not: 66 percent and 52 percent.

### TABLE 2—Ever or Current Drug Use and Psychiatric Symptoms Reported by Alcoholic Women, Suicide Attempters and Nonattempters

<table>
<thead>
<tr>
<th>Drug/Symptoms</th>
<th>Attempters N/Total (%)</th>
<th>Nonattempters N/Total (%)</th>
<th>Difference</th>
<th>95% Confidence Intervals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drug</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nicotine</td>
<td>107/120 (89.2)</td>
<td>143/180 (77.8)</td>
<td>11.4</td>
<td>3.1, 19.7</td>
</tr>
<tr>
<td>Valium</td>
<td>93/120 (77.5)</td>
<td>106/180 (58.9)</td>
<td>18.6</td>
<td>8.2, 29.2</td>
</tr>
<tr>
<td>Stimulants</td>
<td>86/119 (72.3)</td>
<td>91/180 (50.6)</td>
<td>21.7</td>
<td>10.8, 32.6</td>
</tr>
<tr>
<td>Sedatives</td>
<td>79/120 (65.8)</td>
<td>74/180 (41.1)</td>
<td>24.7</td>
<td>13.5, 35.9</td>
</tr>
<tr>
<td>Marijuana</td>
<td>62/120 (58.3)</td>
<td>77/180 (42.8)</td>
<td>25.5</td>
<td>14.5, 36.6</td>
</tr>
<tr>
<td>Psychodrugs</td>
<td>54/120 (45.0)</td>
<td>45/180 (25.0)</td>
<td>20.0</td>
<td>3.0, 31.0</td>
</tr>
<tr>
<td>Cocaine</td>
<td>51/120 (42.5)</td>
<td>37/180 (20.6)</td>
<td>21.9</td>
<td>11.3, 32.6</td>
</tr>
<tr>
<td>Heroin</td>
<td>17/120 (14.2)</td>
<td>7/180 (3.9)</td>
<td>10.3</td>
<td>3.4, 17.2</td>
</tr>
<tr>
<td>Symptom</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feel explosive</td>
<td>59/119 (49.6)</td>
<td>40/178 (22.5)</td>
<td>27.1</td>
<td>16.2, 38.0</td>
</tr>
<tr>
<td>Indecisive</td>
<td>51/120 (42.5)</td>
<td>37/179 (20.7)</td>
<td>21.8</td>
<td>11.1, 32.5</td>
</tr>
<tr>
<td>Tense and nervous</td>
<td>43/120 (35.8)</td>
<td>31/180 (17.2)</td>
<td>18.6</td>
<td>8.4, 28.8</td>
</tr>
<tr>
<td>Fearful, anxious</td>
<td>31/120 (25.8)</td>
<td>22/179 (12.3)</td>
<td>13.5</td>
<td>4.3, 22.8</td>
</tr>
<tr>
<td>Difficulty</td>
<td>38/119 (31.9)</td>
<td>24/179 (13.4)</td>
<td>18.5</td>
<td>8.7, 28.3</td>
</tr>
<tr>
<td>Difficulty getting up in the morning</td>
<td>34/120 (28.3)</td>
<td>26/180 (14.4)</td>
<td>13.7</td>
<td>4.1, 23.4</td>
</tr>
<tr>
<td>Thoughts of others harming you</td>
<td>34/120 (28.3)</td>
<td>27/180 (15.0)</td>
<td>13.3</td>
<td>3.7, 23.0</td>
</tr>
<tr>
<td>Thoughts of harming other people</td>
<td>37/120 (30.8)</td>
<td>26/180 (14.4)</td>
<td>16.4</td>
<td>6.6, 26.1</td>
</tr>
</tbody>
</table>
between suicide attempters and nonattempters, alcoholic or controls.

Discussion

The results suggest that it may not be youthfulness per se which is critical in the relatively high percentage of young female suicide attempters seen in hospital emergency rooms but the combination of youth and substance abuse. Among the nonalcoholic women in this study, there was little difference in the proportion of suicide attempters among younger and older women.

An attempt was made to deal with the question of bias in the selection of clinical subjects by interviewing the patients of 21 different treatment facilities. While the facilities were limited to southeastern Michigan, they represented a wide range of treatment orientations and methods. One may question whether alcoholic and control women are equally likely to admit to a suicide attempt, to remember such an attempt, or to report a suicide attempt. There is no unequivocal answer to this question, but if experimental procedures are reasonably well planned, and the interviewers skilled so as to establish excellent rapport, one can assume that the groups of women were reasonably comparable on this score.

Why the age differential among alcoholic women? One could speculate about the role of depression, impulsivity, hostility, hysterical trends, risk-taking behaviors, and combinations thereof—and the linkage between such patterns of behavior and heavy alcohol intake among different age groups of alcoholic women. Analyses of other data obtained in this study of alcoholic women show nonsignificant age differences in depression among alcoholic women, but significant age differences in early history of impulse control.

Emergency room personnel are acutely aware of the problems of drug overdose and drug abuse. It is worth reiterating: while it is true that young women are a high-risk group for suicide attempts, it is also true that such attempters are likely to have a history of alcohol or other drug abuse. Whether this is due to "... social stigmatization and disapprobation" is beside the point. A person presenting a suicide attempt is in need of assessment and appropriate referral from the emergency room. As for substance abuse treatment facilities, it is important that they be aware of the suicide attempt potential of young women drug abusers; the abuse of a given substance or substances may not be preventable at the point of entry into treatment but suicide attempts should be investigated with the goal of prevention of such attempts.

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